The Hunterian Oration

DELIVERED AT THE

ROYAL COLLEGE OF SURGEONS OF ENGLAND,

On Saturday, Feb. 14th,

BY JOHN MARSHALL, F.R.S., F.R.C.S.,

PAST PRESIDENT OF THE COLLEGE.

MR. PRESIDENT AND GENTLEMEN,—John Hunter—the object of our profound homage to-day—bore a name which, especially when uttered within these walls, excites the remembrance of many great achievements. Whilst therefore that name by itself forms a most appropriate introduction and close to an oration to be delivered in his honour, it suggests such a superabundance of material for occupying the brief but important hour which lies before us, and so many details wherewith to embellish the sentences which must be fitted in between the Alpha and Omega of this discourse, that even the most skilled and intrepid orator might well quail before the task.

Before, however, I attempt to grapple with the difficulties of the undertaking, I will, in obedience to time-honoured example, express, in terms I fear too brief, our common regard for the memory of those recently deceased associates, whose special relations to the College entitle them to attention on this occasion. Not that I would willingly ignore the labours of the many Members or Fellows of the College, who, in their respective careers, now closed for ever, have maintained the character of the surgical profession; but the time at my disposal is short, and the claims upon it, as we shall find, are urgent. I must, therefore, content myself with an honourable mention of Robert Druitt, a well-known author and earnest coadjutor in surgical educational work, and proceed to linger a little longer on three special memorial notices of Allen Thomson, Cæsar Hawkins, and Erasmus Wilson.

Professor Allen Thomson was a member of the board of trustees of the Hunterian collection, to which office he was appointed in succession to his friend and former colleague in Edinburgh, William Sharpey. Familiar, from his thirty years' occupancy of the chair of Anatomy in Glasgow, with the splendid collection, chiefly composed of William Hunter's Museum which was purchased for that University, Allen Thomson felt a special interest in our own collection. His inherited scientific tastes, his intimate acquaintance with anatomy, human and comparative, his devotion to embryological research, and his wide knowledge of physiology, made him a true sympathiser with the work and spirit of both the brothers Hunter.

A better-known member of our board of trustees was the veteran London surgeon, Cæsar Henry Hawkins, the latest representative of a family whose name is indissolubly connected with the history of this College. His grandfather, Mr. Charles Hawkins, the son of the celebrated surgeon, Sir Cæsar Hawkins, was chosen the first Master of the Court of Assistants, when the College was incorporated under the Charter of 1800; and he was re-elected to the same office in 1806. The grandson, the subject of this notice, became a member of the College in 1821, was enrolled as a Fellow in 1843, was elected into the Council in 1846, and an Examiner in 1849. Twice after that he occupied the presidential chair—viz., in 1852 and 1861. From 1865 to 1870 he represented the College in the General Medical Council; and from the year 1872 to the day of his death he was, as already stated, a trustee of the Hunterian collection. Thirty-six years ago to-day he delivered in this theatre an admirable Hunterian Oration, and now it has fallen to my lot to record on the present occasion his great usefulness as a councillor, his strict judgment as an examiner, and his exceptional services as twice President of the College.

Begun only five years after John Hunter's death, Cæsar Hawkins's long life of nearly eighty-six years almost bridges over the space of time which separates us from that occurrence. He was partly trained in the famous Hunterian school in Great Windmill-street, and later in life himself gave lectures there. At first a pupil and then for many years assistant surgeon and surgeon at St. George's Hospital, he was acquainted in the early part of his career with Sir Everard Home, John Hunter's brother-in-law, assistant, and literary executor; and, at a later date, with George Babington, who edited Hunter's treatise on the Venereal Disease. A most distinguished member of a distinguished surgical family, who, like himself, had been connected with Hunter's hospital and been honoured by holding Court appointments, Cæsar Hawkins was widely esteemed for his experience and diagnostic skill, his calm and excellent judgment, his high principle, even temper, and urbane manner. He was a favourite in society and an ornament to our profession; and it is both a duty and a pleasure to express here to-day the universal opinion that he was an honour to our College.

As the name of Hawkins has been linked with the annals of the College for nearly the whole of the fast-waning century, so the future history of the College will, humanly speaking, be associated for centuries to come with that of Erasmus Wilson. That active surgeon, the incidents of whose life are generally known, received the diploma of Member of the College in 1831, was made a Fellow in 1843, took his seat on the Council in 1870, and was chosen President in 1881. The story of his early humble means and moderate prospects, of his marked intelligence, industry, perseverance and success, culminating in the acquisition of such vast wealth, and in the exercise of such unparalleled generosity, will assuredly attract much notice from posterity, and will probably strike future generations with greater astonishment than it does ourselves. We, his contemporaries, can scarcely realise the importance of his unexampled bounty to our College. Its influence for good lies concealed in the future; and the responsibility of administering so grand and absolutely unshackled a bequest will be felt to be by no means slight. That its transfer to our charge may be long delayed is a wish we may all express, together with the hope that Lady Wilson may long be spared, to feel pride and solace in the contemplation of her husband's munificence.

It would be selfish and unjust to the memory of this large-hearted man to restrict our regard on this occasion to his splendid donation to the College; for Margate, Epsom, Swanscombe, and distant Aberdeen will continue in remote times to bear witness to his generous thought; many charitable societies, and countless destitute persons, have felt the touch of his benevolent hand, and the whole nation owes to his liberality the actual possession of the great monolith now standing erect on the banks of the Thames. But to revert to what may truly be designated his colossal gift to the College which he loved so well: it may be an idle fancy, but I am fain to imagine that Sir Erasmus Wilson's mind was, consciously or unconsciously, influenced by his familiarity with Egyptian studies, and that he resolved, not indeed to rear an almost imperishable monument for the preservation of his body, but to secure by what we trust may be an equally enduring design for the benefit of his profession and mankind, the perpetuation of his name and fame.

But what concerning the name and fame of John Hunter? for to that theme it is my business now to turn. Happily, under no conceivable conditions of feebleness or failure in these biennial orations can Hunter's brilliant reputation suffer damage or eclipse; but this does not lighten the responsibilities of the orator, who finds himself embarrassed with a multiplicity of subjects, perplexed by the difficulties incidental to selection, arrangement, and comment, and oppressed by the sense of competition with the eloquent and learned addresses which, dealing with the same topics, have preceded his own.

It might seem easy to pursue the well-trodden course of beginning with a sketch of Hunter's career from his cradle to his grave. But, for my part, I have often imagined that there might sometimes be an advantage in reversing the usual order of biographical research and narrative, and, instead of pursuing the downward and smoother course, to follow an upward and more rugged path. As in tracing the history of mankind or the origin of things, the historian or the philosopher employs this retrograde method of investigation, so, at least in an inquiry into the history of a single individual, we might pass from the later and better-known periods to the earlier less known or even unknown moments of his existence. And again, although, as in the case of a river, so in that of a life, it may be more easy, when it has been fully explored, to glide down its unceasing current, yet, in the upward struggle against the stream, with its halts

and delays, we have larger opportunities of becoming familiar with its peculiarities, its shoals and rocks, its rapids and cataracts, its swift strong currents, its gentle windings, its resting-places, and its sluggish pools.

John Hunter's story may, I think, be said to lend itself readily to this mode of treatment, permitting itself to be broken up into successive and variable stages, one very exceptional incident being noticeable even after his death. Thus, just sixty-six years after his lamented decease in the sixty-sixth year of his age, we find his ashes laid, with fitting reverence, in their final resting-place beneath the stones of Westminster's venerable Abbey, in a pilgrimage to which we may read inscribed on perennial brass his distinguishing title, "The Founder of Scientific Surgery." Thence we pass back to the unostentatious obsequies held at his parochial church, St. Martin's-in-the-Fields, and then again, by way of his house in Leicester-square, to that sad and tragic scene at St. George's Hospital, where, upwards of ninety years ago, to the dismay of both friends and opponents, he so suddenly expired. Transferring our views from the inanimate body to the living man, crossing, as it were, the bar between the ocean and the river, I might, did time permit, trace the many fluctuations of Hunter's life and fortunes, and follow these upwards to his humble cot at Calderwood, the place in which he was born.

In regarding the lives of all great men, we naturally marvel at the extraordinary results which flow from such small beginnings, especially when, standing at their graves, we reflect that as living and working entities they exist no more. There also it is that science sees nothing but the lifeless remains, and, divorced from faith, has no further word to utter. But, on the other hand, when science turns her gaze beyond the cradle into the remote past, she perceives an endless chain of living organisms, and, now independent of faith, wonders by what mysterious ordinance—call it creation, call it evolution, call it what men will—an apparently casual protoplastic unit shall grow up to be a man, who, by force of his innate power, and under certain surroundings, shall come to exhibit such pre-eminence amongst his fellow-men, and leave so deep an impress on the world.

The physical and mental qualities which enabled Hunter to accomplish more than any member of our profession has done before or since were not attributes or possessions peculiar to him alone, but his success was achieved by the mode in which he used them. Some men take opportunities, and others make them: it may be said of Hunter that he did both. I do not here propose to analyse the intellectual and moral character of Hunter, or to pass in review his professional, social, and domestic relations. I need not further particularise his work; for this stands revealed in the museum, or is recorded in the museum catalogues, and in his own writings. Neither will I attempt to vindicate his claims as a discoverer, seeing that the task is most difficult in his case, and that very frequently such discussions still remain open to be rediscussed; nor, lastly, shall I endeavour to assert that, in this or that instance, he has anticipated any later views or doctrines, for such suggested anticipations have often to yield precedence to those of some earlier heralds of coming thought. If it be not too presumptuous a method to adopt, I will rather imagine Hunter to be with us in presence this day; and, judging him by his own deeds and declarations, I will try to point out the mental attitude he would probably assume, in regard to the active work and salient opinions of our own times.

Let me first, with this view, direct attention to the Hunterian collection; for it cannot be doubted that Hunter himself would first wend his way to discover what had become of it. We may trust that he would be satisfied that this College should have become the depository of his fine museum, and would feel gratified at the efforts which have been made for its due preservation and extension. He would appreciate the zeal of its successive conservators and their able coadjutors in perfecting its special departments, osteological, craniological, and otological, in opening out fresh fields of observation and in seeking new forms of illustration. He would realise the value of the palæontological specimens added since his day, and the advantage or necessity of arranging side by side extinct with recent animal forms. He would admire the skill displayed in the new articulated and dissected preparations. He would recognise with special thankfulness the labours of our late conservator, Professor Flower, and his assistants, in the preparation of efficient catalogues of the museum. Nor, finally, can we doubt that Hunter would hail with pleasure the prospect that no inconsiderable portion of the Erasmus Wilson bequest will be devoted to increasing the accommodation for the unique collection, of which his own museum was the foundation. I ask pardon for the simplicity of these assumptions, but we must not forget Hunter's affection for his museum. Remembering this, too, I will add, parenthetically, that the increased number of such collections, and their steady improvement in recent times, would not fail to secure the approval of so great a museum-maker.

Speaking of himself, Hunter says, "I do not read many books;" perhaps, therefore, we might suppose that he would be comparatively apathetic as regards the extension of our library; but, nevertheless, I will credit him with the assumption that he would not be wholly indifferent to the interests of that department of the College.

If we next regard John Hunter as an accomplished human anatomist, it needs only briefly to be said that he could have no difficulty in keeping pace with whatever advances have been made, since his time, in the knowledge of the ordinary structure of the human body, as well as of the numerous varieties in arteries, muscles, and other parts, to which it has been shown to be liable.

The immense progress which has been made in the science of comparative anatomy since Hunter's days could not fail to excite the liveliest satisfaction even in his well-stored mind. Countless as are the facts which have been brought to light by the combined efforts of succeeding comparative anatomists, from the time of Cuvier down to the present moment, they would all be welcome to him. To one who had spent thirty years in this field of study, and had himself dissected and described about five hundred species of animals, vertebrate and invertebrate, the diversified new forms and structures which would be presented to his notice could not of course be accepted by him otherwise than as facts. Parts possessing functional significance would be promptly assigned by him to their respective places in his great physiological series. Special structures would be studied by him with even deeper interest, whilst he would quickly learn to appreciate the many novel and unexpected forms which would lie outside his experience, and even beyond his conception.

So, likewise, the wonderful, and, to Hunter, unforeseen revelations of microscopical research, the growth of that new department of anatomy, histology, the insight we have obtained into the origin and development of the tissues and organs of animals and plants, and the extensive acquaintance which has been made with the existence and characters of innumerable minute independent organisms, both in the animal and vegetable kingdoms, would fill Hunter's mind with amazement and delight. It is true that although he employed magnifying glasses in some of his own investigations, he doubted, and even discredited, the results recorded by other observers. Nor is this surprising, for whilst the microscope had even then realised some important discoveries, there were many announcements made which were either perplexing or absurd—the effects of irradiation, diffraction, and dispersion, being sometimes seriously regarded as indications of minute structure. Besides this, Hunter had so large a field of observation in the obvious conformation of the organs of animals open to his reach by the aid of scalpel, scissors, and forceps, assisted occasionally by magnifying powers that he could well afford to disregard the less trustworthy information afforded by the imperfect microscopes of his day. We may be sure, however, that he could not, and, indeed, would not, resist the evidences of structure and organisation displayed by our powerful and exact modern instruments; and we can easily imagine his acquiescence in the truth of a modified cell-theory of the formation of tissues, and in the doctrine of the protoplasmic origin of animal and vegetable life. He would also find much in modern microscopic discovery which would correct, elucidate, or confirm his own guesses at truth. More especially would this be true as to his accounts of the blood-globules, of the growth of bone, of the structure and sensibility of the teeth, the structure and action of muscular fibre, the muscularity of the arteries, the nature of the digestive process, the commencements of the absorbents, and the developement of the chick.

As a physiologist, Hunter was so zealous, unwearied, and accurate an experimentalist that we may be assured of his sympathy with the present refined and stringent methods of research. He cogitated new experiments whilst in his carriage; he had recourse to them in almost every inquiry; he spared no expense in their execution; he planned them

so carefully, and limited them so in their intention, as to avoid failure or fallacy; he modified them so as to adapt them to new occasions; and he endeavoured to learn something from them even when they yielded unanticipated results. He proposed himself to perform many experiments which he did not live to undertake; he suggested to others certain inquiries which he thought worthy of being carried out; and, lastly, he declared that no experimental results could be depended upon which had not been obtained by duly qualified observers. In all these respects, he would be in accord with the best investigators of our time. We may read with a smile his simple experiments on the effects of a decoction of bark, opium, or calumba on the coagulation of the blood, and be amused at the pleasure he expresses at receiving Ramsden's small thermometer, "measuring only one-sixth of an inch wide in the stem," for the prosecution of his experiments on animal heat; but we may be sure that he would be struck with admiration at the complex mechanical and electrical appliances, and at the variety of chemical agents, employed in the well-furnished laboratories of modern physiologists.

It is needless to observe, to those who are familiar with Hunter's writings, that not only as a physiologist but as a pathologist he was a great vivisector; and we may here take it for granted that he would rank himself with those who now claim the right of man, for beneficial purposes or even in the pursuit of knowledge, to attempt to discover the processes of animal life by tests and trials on living animals. Hunter's own numerous experiments certainly threw light on many of these processes. Amongst others may particularly be mentioned those on absorption by the veins, on animal heat, on the effects of heat and cold on animals, on the injection of various solutions into the veins, on artificial respiration with the view of recovering drowned persons, on the ligature of arteries, on the growth of bones, on the division of tendons, on the effects of extirpation of the ovary, and on the transplantation of living parts into other living parts. All Hunter's experiments were necessarily performed without anæsthetics; but we may be sure that he would now approve of their use on every possible occasion. His large views of the unity of the "principle of life," and of the community of organisation and of action throughout the whole animal kingdom, would lead him to disregard the objections of those who insist on the uselessness of experiments on animals, so far as concerns their application to man. On the contrary, I can conceive that Hunter would contend that every fact ascertained concerning the processes of life, whatever the quarter from which it was derived, whether from organisms high or low in the scale, or from animals in health or in disease, must contribute its quota towards the attainment of more perfect knowledge; and that it is to the sum of these efforts at discovery, and not to individual results, that we must look for a scientific justification of this method of inquiry. Hunter distinctly denounces a physiologist who, "like all mere experimenters," "is not satisfied with those [experiments] which are clear and decisive, but multiplies them unnecessarily"; and he adds, "I think we may set it down as an axiom that experiments should not be often repeated which tend merely to establish a principle already known and admitted, but that the next step should be the application of that principle to useful purposes." It may accordingly be inferred that, whilst Hunter would contend for the fullest right of research, he would not be opposed, either on scientific grounds, or (as he was fond of animals, and certainly not desirous of encouraging cruel propensities amongst men) on moral grounds also, to due restrictions in the exercise of this right. Lastly, in reference to this subject, it should be stated that Hunter did not spare his own body, but subjected himself to an inoculation experiment of a very grave character, in order to test opinions on a pathological question, and to put to proof the efficacy of certain variations in treatment. As a consequence of this, he was not completely cured until the expiration of three years. Indeed, it is not impossible that he incurred still later injurious sequels.

In referring to Hunter's physiological experiments, it is certainly remarkable to find that he never performed any with the view of determining the functions of the nerves and of the nerve centres. Yet it is in this branch of inquiry that, since his time, physiology has made such great strides, almost exclusively by means of experiments. Nevertheless, Hunter was not unmindful of the momentous questions herein involved. Thus, in many instances, he touches very closely the doctrine of reflex nervous action; and yet, notwithstanding the significance of his remarks, I will, in accordance with my settled plan, refrain from a suggestion of discovery or anticipation; but I would ask, Would not Hunter be prepared, would he not be delighted, to listen to the explanations which, thanks to Bell, Marshall Hall, Brown-Séquard, and their numerous followers, could now be given him of the mechanism of the various forms of cerebral and spinal sensory and motor reflex phenomena? Even as regards the higher manifestations of action of the great nervous centres, it is certain from various expressions that Hunter would rise to the level of the most advanced physio-psychology of our time.

But I must next proceed to consider the position that we might suppose Hunter to occupy in regard to the zoological, morphological, and biological questions and doctrines of the present day.

Although Hunter's comparative anatomy collection was avowedly made in the laborious search after the relations between structure and function, and was arranged by him accordingly in a grand physiological series, yet he was a practical zoologist, for he had not only formed a large separate zoological series of specimens, but, studying carefully each subdivision of his collection, he observed not only the uses but the gradations of form which the various organs assume in the different groups of animals with which he was acquainted. Seeing how readily Hunter employed his knowledge of the comparative anatomy of the digestive, circulatory, respiratory, and reproductive organs, and also that of the nervous system, in his attempts at the scientific classification of animals, we may easily conceive that he would have accepted the more advanced Cuvierian arrangement founded on wider knowledge than his own, and how truly he would appreciate the various modifications of that system found necessary by succeeding zoologists.

Regarded as a morphologist, we find that Hunter, very early in his career, repudiated the "idea" of confining himself to the description of a single animal; and, as he accumulated his great wealth of facts, he handled them from a morphological point of view with the boldness and ease characteristic of a master. Thus, he not only speaks freely of the "hearts" of insects, the "lungs" of the snail, and of the "brains" of both, and compares the "median nerve cords" of the former to the "medulla spinalis" of the vertebrate animals, but he writes of there being "ten thousand animals without a brain and nervous system to one with them"; and he furthermore indicates the possibility of a nervous substance being diffused throughout the body of the very lowest animals without any visible aggregated centre. He traces the digestive apparatus from its most complex stomach downwards in the animal kingdom to a simple sac, and in describing the comparative anatomy of the fish's ear, he says, "he is inclined to consider whatever is uncommon in the structure of this organ in fishes as only a link in the chain of varieties displayed in its formation in different animals, descending from the most perfect to the most imperfect, in a regular progression." Again, in his estimate of the character of the strong muscular stomach of the Gillaroo trout, he says, it is as "difficult to determine the exact limits of the two different modes of construction to which the names of gizzard and stomach specifically belong, as in any other case to distinguish proximate steps in the slow and imperceptible gradations of Nature." From all this, it is very evident that Hunter could not fail to perceive the bearing of the multitude of facts pointing to similar conclusions, which have been recorded since his time.

But, further still, there is the oft-quoted passage, written in reference to his developmental researches on the embryo of the chick, in which he says, "If we were capable of following the progress of increase of the number of the parts of the most perfect animal, as they are first formed in succession, from the very first, to its state of full perfection, we should probably be able to compare it with some one of the incomplete animals themselves, of every order in the creation, being at no stage different from some of those inferior orders; or, in other words, if we were to take a series of animals from the most imperfect to the perfect, we should probably find an imperfect animal corresponding with some stage of the most perfect." Here he has expressed, in laboured phraseology, a current doctrine of development; and Hunter elsewhere applies a similar train of reflection to the development of tissues.

I now pass naturally to the consideration of the view

which Hunter would, I believe, entertain, as a biologist, concerning the prevalent doctrines of evolution; and I will commence by citing what I think will be admitted to be some noteworthy passages from his writings.

On the general question of the occurrence of varieties in animals, Hunter, in one place, states as a general fact that "Nature is found deviating from general principles." In another place (in reference, however, to sexual adaptations), he observes that "an animal has the power of improving its parts, so as to make them susceptible of such stimuli as are adapted to the disposition of the parts." Again, he states that "as far as my knowledge has extended, there is not a single part of an animal body which is not subject to an extraordinary formation. Neither," he proceeds, "is this a matter of mere chance; for it may be observed that every species has a disposition to deviate from Nature in a manner peculiar to itself." It is true that these latter remarks are applied by Hunter especially to deviations which he says are "more or less monstrous;" but he afterwards, as we shall see, qualifies that term, and the whole context shows Hunter's genuine appreciation of the natural plasticity of animal organisms. More to the present purpose, however, is the following passage: "The propagation or continuance of animals in their distinct classes is an established law of Nature, and in a general way is present with a tolerable degree of uniformity; but in the individuals of each species varieties are every day produced in colour, shape, size, and disposition. Some of these changes are permanent with respect to the propagation of the animal, becoming so far a part of its nature as to be continued to the offspring."

Contrasting again, in another place, the phenomena of variation as they occur in wild and in domesticated animals, to which he obviously paid close attention, Hunter says, "Animals living in a free and natural state are subject to few deviations from their specific character; but Nature is less uniform in its operations when influenced by culture. Considerable variations are produced under such circumstances, of which the most frequent are changes in colour." In a note, he adds, "From the variations produced by culture it would appear that the animal is so susceptible of impression as to vary Nature's actions; and this is even carried into propagation." Still more striking is a note in which, speaking of extreme variations as monstrous, he reflects, "Perhaps the word monstrous is too strong or not exactly just"; and then, he adds this remarkable passage, "It certainly may be laid down as one of the principles or laws of Nature to deviate under certain circumstances. It may also be observed that it is neither necessary, nor does it follow that all deviations from the original must be a falling off; it appears just the contrary; therefore we may suppose that Nature is improving her works, or at least has established the principle of improvement in the body as well as in the mind." Given the additional factor of the advantages bestowed upon individuals by such improvements in the "struggle for existence," and Hunter would have discerned the Darwinian doctrines of "modification in descent," and "the survival of the fittest."

Nor did the question of reversion to the original type, which Darwin so freely discusses, fail to attract Hunter's notice; for in regard to varieties arising from cultivation, he says, "Whether, if left to themselves, they would in time resume their original appearance, I do not know"; and elsewhere he remarks, "I am inclined to think there never is in the wild state a variety in any species of animal in the same country." Furthermore, he makes the important reflection in regard to reversions, that "it would be difficult to prove whether in many of the gradations they are progressive or retrograde." Lastly, he alludes to the necessary adaption of some insects to uniform, and of others to variable climates; and he reflects on the differences of habit which must thus be brought about.

It will be recollected that Darwin employs the term "correlation," as descriptive of certain constant and associated peculiarities and changes in an animal, which may or may not be capable of further explanation; and it is interesting to find that Hunter, without using that general term, which, after all, is only a term, points out as a "general principle" a constant correspondence between the colour of the pigmentum of the eye and the colour of the eyelashes, not only in quadrupeds, but in birds, even when the colour of the skin, hair, or feathers is different. The occurrence of such correlated sexual characters in animals was recognised by Hunter; and his paper on the peculiarities of a hen pheasant which had acquired the plumage of a male is full of reflections and suggestions conceived in the true Darwinian spirit.

The preceding quotations show at least that had Hunter lived now he would have been a staunch evolutionist. We may picture him devouring with eagerness the writings of that school of naturalists, and especially those of Darwin. There is, indeed, in many respects a similarity between him and Darwin; and as during the lives of these two great searchers after Nature's laws the economy of Earl's-court and of Down Cottage bore a certain resemblance, so, in death, it has been the fate of both naturalists to lie in the same consecrated soil.

But it is time that I considered Hunter's mental attitude towards the present conditions of the sciences of morbid anatomy and pathology, and towards that of the modern practice of surgery. A single sentence will suffice to point out that the comprehensive character of our present morbid anatomy collection, which completely overshadows the thousand and eighty-four specimens which Hunter left, the pains which have been taken to make it illustrative of every known form of disease, the labour of love undertaken by our distinguished colleague, Sir James Paget, towards the completion of the corresponding catalogue, and the promise of future extension of the museum would not escape Hunter's appreciative recognition.

Hunter took care to distinguish between morbid anatomy, or the study of diseased structures, and pathology, or that of diseased action, for he correctly defines "pathology" as the "physiology of disease," and it is needless to say that in regard to both of these closely allied branches of knowledge he would admit the important and indispensable service rendered by microscopic research. Moreover, I will assume that he would accept as great generalisations some modification of the "cellular pathology," and the still more recent views on the influence of protoplasmic action in the production of disease.

In his brief but interesting discussion on Tumours, Hunter defines a "true tumour" as an "entirely new part," so that to him the terms "new formation," "new growth," and "neoplasia" would be quite intelligible; nor would he be slow to perceive the scope of the term "metaplasia," the title of a paper read by Virchow at Copenhagen, in which Hunter's name received early and honourable notice. Although the clinical distinctions between a "cancer," a "fungated sore" (probably a sarcoma), and a "scrofulous enlargement" were pretty clearly distinguished by Hunter, yet he expresses himself not always able to decide between them, and he would doubtless acknowledge the help afforded by the inspection of a few of our every-day microscopic sections; whilst many of his other pathological difficulties would be as rapidly dissipated.

As regards the complex phenomena of inflammation, which Hunter had so long and so carefully thought out, it may be said in a word that the modern microscope, whilst adding so much to his knowledge, would elucidate and confirm almost all his sagacious conceptions. Those important agents in the inflammatory processes, the white blood-corpuscles, though perhaps not altogether unknown, were not sufficiently distinguished in Hunter's time. The existence of these being granted, their amœbiform properties, their emigration through the softened walls of the small vessels, their further action on the tissues, their presence in lymph, and their identity with pus-corpuscles, would fill up the details in the Hunterian sketch.

As a clinical observer, Hunter would undoubtedly, as occasion arose, avail himself of every modern method, physical or chemical, and of every new instrument or test, employed in the investigation of disease. In the use of the thermometer he was far advanced; thus, he says, "the standard heat of the human body is about 99°," and he adds, "I believe that degree is pretty regular;" he found that it differed according to the distance from the centre of the body, that it varied between morning and evening, and was diminished at night. He found in a special case that local inflammation could raise the local temperature from 92° to 98·7°, or upwards of 6°, but he correctly concluded that this local elevation could not reach "the standard heat of the constitution" at the time, "nor even to it in parts far from the centre." He observed on one occasion, the fluid of an inflammatory dropsy at a temperature of 104°, and heard, he says, of a temperature of 112° being found in fever. He believed that "nothing can increase that natural heat," "but some universal or constitu-

tional affection;" but he felt that the question was "worthy of inquiry," and he added, "our measurement ..... can be brought even nearer to the truth than is absolutely necessary to be known in disease." How interested he would be in the detailed temperature charts of the present day, as indicating the vicissitudes of the febrile state.

Hunter's list of specific poison diseases contains a rather incongruous assemblage. But that he would seize with avidity the exacter knowledge of the present day, and thereby extricate himself from this confusion, is quite certain. In speaking of the specific fevers due to miasms, he utters this reflection: "It may, perhaps, in time happen that the human race shall be exterminated by poisons alone; but it is more probable that many poisons are extirpated, and that new ones may arise in their stead every day." How this sentence chimes in with modern questionings as to the recent origin of scarlet fever and typhoid, cholera, and diphtheria! How it suggests the sight of Hunter endeavouring to grasp the possibilities of the issues involved in it, gradually gathering up the now well-ascertained facts concerning the organisms which are associated with anthrax and cattle plague, with tubercle and cholera, listening to the suggestions as to the possible modifiable or self-adaptive nature of these organisms, hoping for the means by which they may be checked, or, as he says, "extirpated," and, in short, gazing into that vista of conceivable triumphs over "living contagia," which seem to promise such grand prospects for the future of medicine and surgery!

In now taking leave of Hunter as a general pathologist, I cannot withhold the comment that, as in physiology, so in pathology proper, his views passed beyond the apparent limit of his subjects. Indeed, he associated the two sciences, and, as it were, blended them at their conterminous borders. He said that disease taught us what was health, as well as that health informed us what was disease; and he distinguished a healthy from an unhealthy inflammation. Besides this, he included all animal life in his pathological speculations, as when, for example, he speaks of the vessels at work in the process of absorption having "more of the polypus in them than any other parts of the body;" and it is certain that he recognised the occurrence of morbid processes in plants, as indicated by specimens preserved in his museum, and which he was accustomed to exhibit in his lectures. We may be sure that Hunter would approve the close relations which have recently been established between physiological and pathological investigations, and would applaud any assistance which the College may hereafter offer towards the establishment of laboratories devoted to scientific research.

In the study of one special disease Hunter showed his usual acumen, and, in spite of the changes and subtleties of modern opinion, will rank with the foremost authorities of the present time. After long and continued study and grave experiment, he adopted the view of the unity of the venereal poison, including not only the soft and hard chancre, but even gonorrhœa, in its effects; and now, although the dual theory has for a time held its sway, he would find a strong inclination in the minds of many surgeons to regard the two kinds of sores and their markedly different respective consequences as different manifestations of one poison, in different states or under different conditions. Speaking of the poison of the lues, which is his equivalent for syphilis, Hunter says, "it produces fever which is of the slow kind." "In the first stage of the disease, before it begins to show itself externally, the patient has all the symptoms of an approaching fever. These symptoms, continuing for some days, and often for weeks,..... show that there is some irritating cause, which works slowly upon the constitution." He further suggests that this fever might "exist without the presence of local symptoms." Hunter, furthermore, describes exceptional cases, more or less resembling lues, in which peculiar and aggravated symptoms occur, such as extensive and obstinate sores, and falling of the nails, and which may even end fatally. These, he says, "show as much as possible that new poisons are rising up every day, and these very similar to the venereal in many respects, though not in all." In reference again to syphilitic affections of the bones, he remarks: "Cases sometimes occur in which, after the venereal disposition has been corrected, another disease takes place in the bone, the nature of which will be explained when we shall consider the effects remaining after the disease is cured, and the diseases sometimes produced by the cure." His explanation is that "new diseases" may arise from the mercury alone, or from "different combinations" of the mercurial irritation, the venereal disposition, and the natural disposition, which he assumes may itself not be healthy. In many cases, he suspects that this natural disposition may be of a scrofulous nature; but he would not exclude gout.

Considered as a practical surgeon, present with us to-day, Hunter would find his capital operation of ligature of an artery high up for the cure of aneurysm, in some degree superseded by the improved method of compressing the artery in the same situation. He mentions having, in one of his cases, tried compression, he does not state where or how, but he gave it up on account of the pain produced by it. His own successive improvements in the actual operation, by the more limited exposure of the artery, the non-inclusion of the vein, and the use of one ligature more firmly drawn instead of four applied more loosely and with graduated force from above downwards—all steps calculated to minimise the necessary accompanying suppuration, the evil effects of which he had to deplore—show how gladly Hunter would have adopted the non-irritating silk or the absorbable catgut, cut short and left in a non-suppurating aseptic wound.

As a general rule, Hunter's treatment of wounds was as simple as possible. He employed very few local applications. His advocacy of scabbing by the drying up of all superficial sores was one indication of this, for it commended itself to him as arresting the suppurative process. It is easy to understand how pleased he would be with the modern practice of skin-grafting; and the more serious operations of transplanting, under aseptic conditions, pieces of bone, and recently even of a whole muscle from one animal to another, would have struck Hunter as interesting advances on his own successful attempts to make the cock's spur grow in the comb, and to transplant human teeth.

Hunter's view that surgical operations were often a "tacit" admission of our inability otherwise to accomplish a cure, and that they should always be approached with "a sacred dread and reluctance," would assuredly be qualified now, when in so many new and bold operations so great a measure of success is obtained, and that without the suffering Hunter had to witness, destitute as he was of the welcome aid of anæsthetics.

The great number of novel operations which have been devised since Hunter's time would, no doubt, astonish him; but, on the other hand, it is interesting to find that some of these would be more or less familiar to him. Thus, in reference to external herniotomy, he directs that in congenital hernia the sac should not be opened; he advises the "extirpation" of varicose veins as "very proper, unless the disease is too extensive"; of course, the tunica vaginalis was cut open for the cure of simple hydrocele; he describes minutely the steps of an operation for the cure of unyielding urethral strictures, without or with false passage or urinary fistula, by laying open the distended urethra through the perineum behind the seat of constriction, then passing a fine probe forward through the stricture, dividing this, and afterwards passing a full-sized instrument along the whole canal into the bladder. Acting on a belief, which is shared by many, that cancer is a local, not a constitutional, disease, that it is not hereditary, and only contaminates the system by spreading into it, he advocated as a duty the removal of every enlarged and hardened gland which could be detected in the axilla, in cases of cancer of the mamma, whenever that could be safely accomplished, even those which, he mentions, are often detected when some have been taken away. Lastly, he alludes to lumbar abscesses from which a urinary calculus had been removed, thus justifying a recourse to actual nephrotomy.

As is well known, in reference to the operation of ovariotomy, Hunter says, somewhat brusquely, "There is no reason why women should not bear spaying as well as other animals. It would simply be opening the cavity of the abdomen, which we often do without inconvenience in healthy constitutions." In speaking of peritoneal wounds generally, and the mode in which they are healed, Hunter drew upon his experience as a military surgeon, often alluding to the healing of sword wounds and gunshot wounds of the abdominal cavity, more especially in cases in which no viscus had been wounded. He advised that the stitches of the abdominal suture should not "pass through into the cavity of the abdomen, as they would interfere with rendering the cavity perfect; for, as these continue, suppuration

of the wounds will come on, they acting as a seton, by which exposure of the cavity will be greater, though, perhaps," he continues, "from the irritation they would occasion, adhesions would be formed at the bottom of the wound before this suppurates, which might prevent the admission of air." We perceive here the natural dread which Hunter had of that exposure of a wound or compound fracture to the air which, his whole experience taught him, led to the dangerous suppurative, instead of that milder adhesive, inflammation which ensued in a perfect cavity, or in a simple fracture, or in a subcutaneous or completely covered wound. The full precautions of the antiseptic method being explained to him, he would now have less fear of passing sutures through the whole thickness of the abdominal walls. Supposing suppuration of the peritoneal cavity to have occurred, Hunter observes, "How far in such cases it might appear desirable to make an opening into the abdomen, and throw in warm water repeatedly to wash away the matter, I will not at present determine."

The whole tendency of Hunter's teaching in regard to wounds being to prevent suppuration if possible, it was evidently a sorrowful confession on his part to say, "It appears very difficult to give a true and clear idea of the whole of the chain of causes leading to suppuration." After mentioning ordinary instances of suppuration following exposure to air, he states "these effects might appear to be due to the influence of air"; but, he points out, that air in emphysema of the areolar tissue does not do this, unless the skin be wounded, nor does it do so in the air-spaces or hollow bones of birds, unless these are laid or broken open. "Air, therefore," he continues, "is not the cause of suppuration." Yet Hunter was aware that, before the opening of large abscesses, "patients are generally pretty well, but immediately after that time they become unhealthy and hectic, which continues till death." He recognised that the mischiefs—viz., of hectic and dissolution (i.e., of pyæmia and septicæmia), which followed large wounds, compound fractures, and amputations, appeared "more in hospitals than in private practice, more in large towns than in the country," "often without apparent cause," "frequently in the most healthy persons," "and were rapidly fatal, a result not "due to the sore as an immediate cause," but certainly assisted by it, as the symptoms never occurred "when the sore is healed." For the cure of such cases, he adds, "I do not find anything that has any effect." Yet Hunter saw clearly that "air could convey most poisons," that the air of "warm, moist places was the most impure," and that "the effects of an impure atmosphere are found in gaol distempers and hospital diseases; very few of the former places are ever free from foul air, and most hospitals are more or less affected with it." If, therefore, Hunter had now demonstrated to him that whilst mountain air contains minute organisms in units, country air in hundreds, town air in thousands, and hospital air in tens of thousands, and furthermore had explained to him the relations of organisms of this kind to the fermentative and putrefactive processes, the dangerous or fatal results of the entrance of septic matters from the surfaces of exposed wounds into the blood, and the established efficacy of so-called antiseptics in destroying such organisms, and arresting the decomposition associated with their presence, he would hail the discoveries of Pasteur and the triumphs of Lister with the gratitude they deserve.

In three places in Hunter's writings I find that he uses the now well-worn term, "antiseptic," twice in reference to internal remedies, and once to external applications. In the treatment of hectic, he says, "strengtheners and antiseptics are recommended. Strengtheners are proposed on account of the debility which has evidently taken place; and antiseptics, from the idea of absorbed pus going into the blood and tending to putrefaction." Again, in connexion with the treatment of hectic, he says, "Antiseptic substances have also been employed, such, for instance, as preserve dead flesh; but this is very absurd." The allusion to the external use of antiseptics is in relation to the local treatment of mortification. "Scarifications," he says, "have been made down to the living parts, that stimulant and antiseptic medicines might be applied to them, as turpentine, the warm balsams, and sometimes the essential oils." Such local treatment, however, he regards also as absurd; and, although the agents thus enumerated are all antiseptic, from the point of view of perfect antiseptic surgery, this is true; for putrescence would already have set in. Yet Hunter speaks of tar water and turpentine as often productive of great good as local applications in certain cases, and laments that these and other remedies "sometimes fail, and that we do not possess a sufficient number for the variety of constitutions we meet with." His felt want could now be easily supplied.

There is one feature of the modern practice of surgery which could not fail to be noticed and commented on by Hunter; and at first he would probably disapprove of it, as a departure from the simplicity of the art which he practised. I mean the growth of specialities. But this he would soon find is a necessity as well as a cause of the immense accumulation of facts since his time; and he would become reconciled to it, with all the special instruments and other appliances which modern ingenuity has devised. There is, however, one speciality which, as a great surgeon as well as a great experimentalist, he would be doubly prepared to receive with acclamation—viz., the discovery and use of anæsthetics as one of the greatest boons ever conferred on sensitive beings, whether animals or man.

There are other topics and suggestive passages in John Hunter's writings on which some comment might here be made, but I have selected those most suitable to my purpose. Others necessarily contain certain erroneous statements and conclusions, due to want of more full and accurate knowledge, and occasionally to defective reasoning. Nevertheless, there is hardly a chapter from which some information might not be taken, or some benefit derived. It is also evident that the commentators, in the collected edition of his works published in 1835—that is, just fifty years since—are not unfrequently in error. These works themselves deserve to be re-edited.

How is it that we can look back over the intervening century since Hunter was in his prime and find him so at one with us and ourselves so in harmony with him? This unison neither implies a supreme prescience on his part nor a standstill in science and practice, continuing to our day. On the contrary, there are hosts of facts familiar to us which he did not know, and there have been evolved many opinions and conclusions in advance of his speculations and doctrines. It is, as I have endeavoured to show, because our work and thought to a great extent pursue the lines which he has laid down. The issues in which we join were his; the instruments and weapons may have improved, but the strife and the method are the some. We believe in observation and experiment, and Hunter devoted his whole active life to both; he waited for long years to complete his labours and to mature his reasonings; and though unfortunately interrupted by his sudden death, the main results of his labour are secured. He followed Nature, and endeavoured to detect her ways, for the benefit of mankind. We, in our time, are aiming at the same grand end.

It has often been held as a matter of reproach, in regard to John Hunter's philosophy, that he too palpably personified Nature, looked always for "final causes," and attributed to the living organising principle, or "principle of life," or even to parts of the body in which it acts, a consciousness of its own actions and intentions. The instances in which Hunter does this are very numerous; but when duly considered, his language on these occasions must be regarded as largely figurative, and springing from a craving and a struggle to divine the motives of Nature; and, at all events, they should not be taken as meant for explanations of the vital processes concerned. If, indeed, we consider the most direct evidences of his adhesion to the then prevalent doctrine of "final causes," we discover proof that his thoughts were only partly entangled in the teleological net, and that his mind struck out freely to investigate the modes of action by which the end or final cause was to be obtained. If, for example, in his morphological and physiological studies he sought to explain form by use and structure by its adaptation to function,—and if, in his pathological researches, he accounts for the coagulation of the blood, the occurrence of the adhesive process in inflammation, the formation of pus and its tendency to the surface, the growth of granulations and of new cuticle, the occurrence of eruptions in fever, and other diseased actions, by a reference to their occasionally beneficial effects or salutary ends,—all this did not prevent his admitting that not infrequently these same morbid processes are sadly detrimental in their results, that he often failed to detect what the intention of Nature might be, and that, sometimes, it would have been better if she had acted differently. Here, again, though he sought diligently for final causes to satisfy one want of his mental constitution, yet he never rested there. He desired to know the

"how" as well as the "why," and he therefore occupied himself digilently and constantly in the observation of Nature's ways, and in experiments on her living products and their actions. "It is astonishing," he says, "to see what little curiosity people have to observe the operations of Nature, and how very curious they are about the operations of Art;" and he clearly discerned in all his proceedings that no perception of the end arrived at by Nature really afforded any explanation of the processes she employed. His chase after final causes meanwhile gave a zest to his inquiries, but a close acquaintance with Nature's actual work was needed to find food for his intellectual appetite. If, too, we reflect on his modesty in the expression of his opinions, as when he uses such phrases as "I conceive," "I suspect," "I do suppose," "I am apt to suppose," and others of a like character, and on his horror of definitions, which, he says, "of all things on the face of the earth are the most cursed," on his occasional avowal of ignorance and candid statement of facts adverse to his opinions, and on his incessant promises to satisfy himself by experiment,—I think we may conclude that in the fields of both science and practice, his mental constitution was as philosophical as the work he performed in the world is far-reaching and gigantic.

I have now, Mr. President and Gentlemen, almost fulfilled the duty assigned to me; but I have as yet said not a word of John Hunter's personality. He is described to us as having been "about the middle stature, of a vigorous and robust frame, and free from corpulency; his shoulders were high and his neck short, his features were rather large and strongly marked, his eyebrow projecting, his eyes were of a light colour, his cheeks high, and his mouth somewhat underhung. In dress he was plain and gentleman-like, and his hair, which in youth was of a reddish-yellow and in his latter years white, he wore curled behind." In Reynolds's fine portrait, which, as is usual on these occasions, is placed before you, he is represented sitting, self-contained, abstracted from all his surroundings, absorbed in pleasurable thought. Looking at his face, we may well agree with the great master of physiognomy, Lavater, who said, "that man thinks for himself;" and we may feel that he appears equal to the conception and accomplishment of all he actually did. About a century has elapsed since that picture was painted; and Hunter at one time, when engaged in observing the effects of cold on animals, indulged, like some others, in the fancy that a man might be frozen for a time, and then, as he says, "by getting himself thawed every hundred years, he might learn what had happened during his frozen condition." "Like other schemers," he adds, "I thought I should make my fortune by it; but this experiment undeceived me."

I have to-day endeavoured to revive him, not in body, but in spirit, conversant with our present position in science and in practice, and supposed to be studying a vast crowd of additional facts, contemplating fresh generalisations and putting new methods to the test. Our acknowledged teacher, he would find much to learn; but what true teacher is not eager to be taught? Hunter would be an apt student, in harmony with us in thought and plan, hand to hand with us in work and deed. His fitness to understand all that we have since discovered, and to co-operate with us in all our novel doings, constitutes, in truth, his best claim to the grand title, recorded above his grave, "The Founder of Scientific Surgery."

And, now let me repeat, before I retire, that I recognise our presence here to-day as an act of homage to our great predecessor. I desire also to express the pleasure which I have experienced in the preparation, and, I may add, in the delivery, of this oration. The hour at my disposal is rapidly expiring, and the moment is at hand when the ever oncoming future, traversing the imaginary film of time, which is the only real present, will be for ever merged beyond it in the past; and I am well content that my last utterances from this place, spoken between the two eternities, should be the name of that great biologist, that illustrious master in our noble craft, John Hunter.

THE HEALTH OF WELLINGTON.—The report by Dr. Meredith, medical officer of health, on the urban district of Wellington for 1884, states that the year was, like the one before it, marked by a considerable prevalence of illness of diphtheritic nature. The rate of mortality was 20·59 per 1000, and of births 27·35 per 1000.

ON VISCERAL SYPHILIS.[1]

BY J. S. BRISTOWE, M.D., F.R.S.

CASE 1. *Tertiary Syphilis; Obstruction of Abdominal Vena Cava, with great Dilatation of Veins in the Walls of the Chest and Abdomen; Large and Nodulated Liver; Affection of Left Elbow and Knee; Incomplete Recovery.*—On the 8th of last November, Rachel W——, a woman forty-two years of age, was sent to me by Dr. Shackleton of Norwood, and received under my care into St. Thomas's Hospital. She was married about twenty years previously, and some little time after attended as an out-patient at St. Bartholomew's on account of ulcerated sore-throat, which was of considerable duration. Her first child was born two years after marriage, and three others at successive intervals of two years, all four having reached the full term, but dying either in the act of delivery or within a few minutes after birth. The fifth and only subsequent child was born eight years ago, and is in good health. There is no definite history of syphilis or of any cutaneous eruption. For the last seven years she has suffered from ulcerated legs. About three years ago her abdomen became enlarged, and after a time shrank again. Two years ago she had what she calls an attack of rheumatic fever, and about the same time began to suffer from pain in the epigastrium, increased by food, and attended with vomiting, and then she first noticed that the veins in the abdominal and thoracic walls were enlarged. How long they had been enlarged, or enlarging, she did not know; but it was at this time her attention was first specially attracted to them, and thinking they were not natural, she compared herself with one of her female friends. The attack of so-called rheumatic fever lasted some few weeks, and several joints were inflamed. All of these got well excepting the left elbow, which has remained painful, tender, and swollen ever since. The pain in the epigastrium, the loss of appetite and sickness, have also continued, and indeed have gradually got worse; the epigastrium, moreover, has become swollen and very tender, and latterly a tumour has been recognised in it. About three months ago she vomited a good deal of blood. Six weeks before admission the left knee became swollen and painful. The swelling, she says, has diminished, but the pain in it and tenderness have been getting more severe. On admission, she was a thin, dark-complexioned, pale, cachectic, anxious-looking woman, complaining of weakness, loss of appetite, sickness, pain, and tenderness in the epigastrium, pain and tenderness in the left elbow, and pain, tenderness, and swelling in the left knee. On looking at the anterior surface of the abdomen and chest I was at once struck by the large development of the subcutaneous veins. Tracing these from below there were two large ascending tortuous veins (the epigastric), of which the right was the larger, and fully equalled an ordinary cedar pencil in diameter; these, somewhere about the level of the umbilicus, divided into branches, and at least seven such branches (having the average diameter of an ordinary quill pen) ran up tortuously, but diverging, so as to be disposed fan-like all over the anterior surface of the upper part of the abdomen and the chest, as high as the clavicles. It was assumed that the ascending cava had been obstructed, and that the blood returning from the lower extremities was carried mainly through the epigastric veins to the internal mammary and intercostal, and so conveyed into the superior cava. A strong venous hum could be heard through the stethoscope in most of the dilated veins contained in the walls of the thorax. The abdomen was full, especially in the epigastric region, and for the most part soft. But the epigastrium itself was occupied by a large, hard, and very irregular tumour, which descended to within an inch and a half of the umbilicus. This appeared to be continuous with the liver, and moved very slightly with the respiratory movements. The liver did not rise higher into the chest than normal. The epigastric region was extremely tender. The spleen appeared to be somewhat enlarged. There was no evidence of intra-thoracic disease. The left elbow-joint was fixed in the semiflexed position; it was hot and slightly swollen, from thickening of the soft parts only, very tender, and the attempt to move it caused much pain. The muscles of the

[1] A paper read before the West Kent Medico-Chirurgical Society on Feb. 6th, 1885.

upper arm were distinctly wasted. The left knee was also kept partly flexed; it was swollen, hot, and tender, and could not be moved without provoking extreme pain. The swelling, which was considerable, was mainly of the tissues around the lower end of the femur. There did not appear to be any effusion into the joint. Tongue clean and moist; pulse 100; respiration 24; temperature 99·8°. Bowels regular. Urine containing a trace of albumen. Catamenia absent for five years.

When I first saw her I assumed that the patient was suffering from some form of malignant disease, probably sarcoma. Although my view did not fit in with all the facts of the case, it seemed to explain the more important of them. I thought that the primary tumour had taken its origin among the retro-peritoneal glands and obstructed the vena cava, and so led to the dilatation of the superficial veins; that in the course of time it had grown into the mass which was occupying the epigastric region, and so had caused the pain and tenderness in that situation, together with the loss of appetite and vomiting; and that the recent affection of the bone, limited as it seemed to be to the lower end of the femur, indicated a secondary growth in the bone. With respect to the epigastric tumour, I did not venture to express a decided opinion as to whether it was all a mere outgrowth of the deep-seated glands, or in part due to secondary implication of liver or stomach, or both. My view did not account for the rheumatic attack of two years previous, or for the condition of the left elbow, which from the little enlargement it had undergone could scarcely have been the seat of sarcoma. Taking this unfavourable view of the case, I treated the patient with sedatives, such as bromide of potassium, opium, and cannabis indica, tonics, and dieting. Little change took place in her condition during the next six weeks. She often complained of epigastric uneasiness and pain; but her sickness was very variable, and intermitted at times for a week or more. She never vomited blood, and she took food on the whole fairly well. Her elbow neither improved nor got worse; but some effusion took place into the knee-joint, which remained immovable and extremely tender and painful. But at the end of this time she was still apparently quite as well in her general health as she was on admission, and there was no evidence that the epigastric tumour had increased in size; she had certainly not lost flesh. On Dec. 21st my young and able colleague, Mr. Pitts, saw the case with me. He examined the joints with extreme care, and came to the conclusion that there was no affection of bone, that the swelling was due to inflammatory thickening of the soft parts, and suggested that this affection might be syphilitic. He pointed out, moreover, as adverse to the opinion I had formed, that secondary malignant disease of long bones occurs for the most part in the shaft, and not in the joint ends. It was now, for the first time, that we elicited the suggestive fact that her first four children had all died at birth, and that she had formerly suffered from ulcerated sore-throat for a long time. The progress of the case hitherto had led me more and more to question the sufficiency of the view I had taken of its nature, though I had not yet definitely discarded it, and I hailed Mr. Pitts's suggestion, which seemed to me applicable to the whole series of lesions, and to be approved by the recognised facts of the case. Moreover, as I shall presently show, the adequacy of the explanation was proved to me by my own previous experience of constitutional syphilis. I at once prescribed ten grains of iodide of potassium and forty minims of solution of perchloride of mercury, to be taken three times a day. Nearly seven weeks have elapsed since my patient has been subjected to the new plan of treatment, and I think the results confirm the correctness of the amended diagnosis of the case. The elbow and knee have slowly but uniformly improved, and are now practically well. The tumour in the epigastrium has appeared to me to have become somewhat smaller and softer, and certainly less painful and tender, and the superficial network of veins has undoubtedly become less marked. Also she has improved remarkably in flesh, strength, and spirits; but she still suffers from occasional vomiting. I may mention here that on the day on which she was ordered to take mercury and iodide of potassium she was, during the morning, unusually low-spirited, could not collect her thoughts, and said she saw double, and in the evening had a fit, in which she was rigid and insensible for a couple of minutes, and on which followed severe headache and rigidity of the right leg, continuing for some hours. She has had no cerebral symptoms since. I need scarcely add, perhaps, that according to my present view the patient has had some gummatous growth in the neighbourhood of the vena cava ascendens, and involving the vein either by pressure or directly, and that the epigastric tumour is probably due to a series of gummatous tumours developed in the substance of the liver. The reasons which had prepared me readily to alter my views of the nature of the case just narrated, and to accept as a general explanation the suggestions made by Mr. Pitts in reference to the affection of the joints, have already been given. But the reasons which decided me were partly my personal knowledge of the occasional abundant diffusion of the later syphilitic lesions, and their tendency to ape the characters of disseminated cancer or sarcoma, partly my vivid recollection of some remarkable cases which collectively presented an almost exact counterpart of this woman's case, and something more.

I now proceed to give the details of the more important of the cases to which I refer. The first of them is one in which a syphilitic patient was attacked with symptoms of mediastinal tumour; from which, under suitable treatment, he recovered. The point of special interest, however, is that he had as one of the signs of tumour temporary obstruction of the superior cava, or of both innominate veins.

CASE 2. *Tertiary Syphilis; Symptoms of a Mediastinal Tumour, with Obstruction of Vena Cava or both Innominates, removed under Influence of Antisyphilitic Treatment.*—Liberty V——, a labourer, forty-three years of age, came into St. Thomas's Hospital, under my care, on May 5th, 1880. He was a sailor for some years, then a navvy, and has drunk hard. He had syphilis in 1857, but was not treated for it. In 1869 some bone exfoliated from the hard palate; and in 1870 several of the upper teeth came away with their alveoli. Three years ago he fell from a building in course of erection, and injured one of his testicles, which was removed a year later. For twelve months he has had a cough, at first dry, latterly attended with expectoration. But in other respects he was well up to about three weeks ago, when he observed some swelling of the neck and eyelids, which came and went, but on the whole increased, and dilatation of veins in the neck and chest, and blueness of the ears. In a short time these symptoms were followed by difficulty of breathing and dysphagia. He has complained of a sense of heat in the head and neck, but of no pains or uneasy sensations referable to the chest. He is a spare and in many respects a healthy-looking man. He is suffering from dyspnœa; has been unable to lie down for two or three nights, and now has to sit up in bed. He states that he could not swallow at all yesterday, and now he can only swallow fluids, and these with difficulty. His face is swollen and congested, especially the eyelids, which, with the conjunctivæ, are livid. The ears also are livid, and the lips, though in a less degree. The neck is œdematous, and the veins, especially those on the right side, are much dilated. They do not pulsate. The superficial veins of both arms are a good deal dilated, but there is no œdema. There is great enlargement of the veins over the back and front of the chest, as low as the nipples. The larger ones form a prominent and coarse network, very visible and full at all times, but starting into strong relief whenever he coughs. There are also over the chest many pencils or groups of smaller veins, and knots corresponding with their points of union, or with the points at which the deeper veins become superficial. No venous dilatation and no dropsy appear below the waist. There is no sign of cardiac affection, and no definite proof of disease of the lungs. Fairly good resonance exists everywhere, excepting that it is thought there is slight relative dulness at the right apex; but there is no abnormal vocal fremitus or resonance, and the breath sounds (which are somewhat prolonged during expiration) are in other respects fairly healthy. There is no tubular breathing, rhonchus, or crepitation. The cough, which comes on at times in paroxysms, is loud and metallic, and attended with scanty expectoration. There are no physical signs of tumour or of aneurysm in the chest and no enlarged glands in the neck. The abdominal viscera seem free from disease, excepting that the urine presents a trace of albumen. The inguinal glands are somewhat large and hard. The soft palate and part of the hard palate have been destroyed, leaving a large triangular gap of communication between the mouth and nose, in consequence of which his voice is nasal and indistinct. It was evident that the patient was suffering from obstruction either of the inferior cava or both innominate

veins, and that the affection causing this was, directly or indirectly, causing difficulty of swallowing and orthopnœa. An intra-thoracic tumour was the obvious explanation. My former experience would have led me to suspect the presence of a malignant growth or of an aneurysm, even though I could not detect any local evidence of one or the other; but the clear evidence he presented of having suffered from constitutional syphilis made me hope that the intra-thoracic tumour might prove to be syphilitic, and I at once ordered him to take ten grains of iodide of potassium three times a day. For a couple of days there was no change for the better; in fact, if anything, he got worse. He was unable to lie down; he was hungry, but could only with difficulty swallow fluids in small quantities; the lividity and œdema of the face and neck were considerable; and his paroxysmal cough was frequent and distressing. Then he began gradually to improve. The lividity and swelling of the face first diminished; then his dyspnœa and cough became less and less severe; then he began to swallow with increasing facility; and, lastly, the dilated veins seemed to shrink and become less visible. Marked diminution of lividity was noticed on the 8th and 9th, and no lividity whatever remained when he left the hospital. About the same time his breathing and cough began to improve, although there was for a time a liability to paroxysms of dyspnœa and of cough. On the 17th it was noted that he was much better in these respects; and there was no trace of anything of the kind when he was discharged. About the 12th or 13th he was able to swallow soft solid—for instance, bread-and-milk; and on the 17th was taking fish without much difficulty. The dilated veins also gradually shrunk; and at the time he left the hospital the knots and pencils of small veins had almost completely disappeared, and the larger veins in the thoracic walls were scarcely noticeable, except when the patient coughed, at which time they started into well-marked relief, and formed a network in front and behind, the vessels measuring perhaps from an eighth to a sixth of an inch in diameter. He left the hospital on May 31st, at which time he expressed himself as feeling perfectly well, and better than he had done for years. The only apparent trace of his malady was the persistence of dilated vessels. I may add that during his illness he had some extravasation of blood into one of his conjunctivæ; and that on the 15th and 16th he was observed to perspire pretty freely on the right side of the face, while the left remained dry. At this time, too, the left pupil was larger than the right, though both acted to light. A day or two later the surface temperatures were taken on the two sides, when it was found that that of the right temple was 95°, and that of the left 96°; that of the right anus 93°, and that of the left 94°. On the 25th the temperatures on the two sides were equal. Throughout his illness his temperature was normal or a little subnormal. The patient has called on me frequently since. I have seen him within the last few months. He has never had a recurrence of the above symptoms; and when stripped no one would, under ordinary circumstances, observe any enlarged veins in his chest walls. When, however, he coughs, they start out at once into relief, just as they did at the time of his leaving the hospital.

(To be concluded.)

ULCERATION OF THE APPENDIX VERMIFORMIS, FOLLOWED BY PYÆMIA.

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IN his extremely interesting clinical lecture, published in THE LANCET of December 6th, 1884, Dr. Fenwick makes the statement that in ninety-five cases of ulceration of the appendix vermiformis which he has collected "abscess of the liver was only found to be present in one;" and further on remarks that "when we remember how commonly pyæmia takes place in cases of deep abscess of the limbs, we cannot but be surprised at the small number of cases recorded as following perforation of the appendix." I hope, therefore, that the following notes of a case which recently came under my care, and in which pyæmia was a prominent feature, may be interesting. I may remark that in many respects it will be found to closely resemble the first case described by Dr. Fenwick as occurring in his own practice.

Private W. Y——, aged nineteen, a recruit of only two months' service, was admitted to hospital on October 24th, complaining of great pain in the abdomen, accompanied by nausea, shivering, pains in the back, and headache. He was in a very weak condition, and stated that he had felt ill for the previous three days, but had not reported himself sick, as he was about to purchase his discharge from the service, and was anxious, therefore, not to be sent to hospital. He had never been in India or elsewhere abroad, and had had neither ague nor dysentery. There was no history of syphilis, and no family history of tubercle. On examination the tongue was found to be very foul in the centre, with red tip and edges; skin hot and dry, though at times there were copious perspirations; bowels constipated. The temperature on the evening of admission was 101°; pulse 110, hard and jerky. He complained of pain and tenderness on palpation over the whole of the abdomen, but chiefly over the epigastric region; this, however, was not markedly increased by pressure. Slight gurgling was noticed in the cæcal region, but there was no dulness or induration. The abdomen was distended and tympanitic. Hepatic dulness was slightly increased in front, and there was marked dulness posteriorly up to the angle of the scapula, with tubular breathing, and increased vocal resonance. There was, however, no further trace of lung disease elsewhere. Splenic dulness was not increased. The patient was ordered half an ounce of castor oil (to be taken immediately), a saline mixture (an ounce to be taken every four hours), and fomentations. His condition remained unaltered till the 31st, constipation continuing obstinate, and the temperature showing very irregular rises and falls, accompanied by rigors and sweating. Pain was referred more to the head than the abdomen, and little sleep was obtained.

On the 31st (eight days after admission) jaundice supervened, the urine was high coloured, and the motions (which were few and scanty) were very pale. The following day the temperature, which was 99·8° in the morning, rose to 106·2° in the evening, being accompanied by increased violence and number of rigors. The pulse was only 104; the patient lying on his back in a drowsy condition, but without delirium. There was increased headache, but little abdominal pain, and the legs were not drawn up. There was no dyspnœa or other lung symptom.

March 2nd: Jaundice more marked; frequent attacks of nausea, with vomiting of bilious matter. Temperature fallen to 102·8°. Quinine in two-grain doses, with saline mixture every fourth hour, light linseed poultices to abdomen, and milk and soda water were ordered.—3rd: Symptoms remain the same, but are less severe; jaundice subsiding; temperature and pulse lower.—6th: Temperature has fallen to 101°; pulse very weak (100); respiration 36. Tympanites less, and little or no pain in abdomen. Urine increased in quantity, less highly coloured, and containing some albumen. Bowels have not been moved since the 3rd. Ordered six drachms of castor oil.—8th: Last night violent purging set in (without the oil being taken), bowels acting twelve times. The motions are small in amount, of pale colour, and very offensive. Temperature reduced to 100°, pulse 120, respiration 36. Rigors, followed by copious sweating, occurred several times in the twenty-four hours. Very little sleep at night. Ordered two ounces of brandy in small quantities.—Evening: Much weaker. Temperature at 3 o'clock rose to 101°, and at 6 o'clock it was 104·4°; pulse 140; respiration 46. Tongue dry and brown; sordes forming on the lips; purging, which was less during the afternoon, is recurring. Ordered a mixture of sulphuric acid with opium, one ounce three times a day; brandy (half an ounce) every second hour.—9th: Rallied somewhat during the night, obtained some sleep, and says he is much better; no headache, and but slight pain in abdomen. Temperature fallen again to 100·4°; pulse 120, soft and compressible; skin dry and harsh. There is nausea, but no vomiting since yesterday evening. Bowels moved four times in twenty-four hours; motions of pale-yellow colour, and containing curdled milk. Jaundice appears more marked to-day. General condition is drowsy, but when aroused he will answer questions intelligently; there is no delirium. Takes nourishment well. Brandy continued.—10th: Passed another good night, and appears brighter. Temperature 100·8° (last night 104·4°); pulse 112, and improved in character; respiration 32. Bowels acted

five times since yesterday; stools contain more bile and are less offensive. Vomiting has ceased.—11th: Condition unaltered; passed a bad night, but there is no increase of weakness. Temperature keeps down (100·8°); pulse 108; respiration 28. Diarrhœa is again troublesome; bowels moved eight times, chiefly in the night. Takes quinine in three-grain doses thrice daily; also the acid and opium mixture.—12th: Condition less favourable. Obtained little sleep last night. Temperature 102·8°; pulse 120; respiration 32. Bowels moved six times since yesterday morning; motions yellowish-green and containing mucus, but no blood. Urine is less highly coloured, slightly acid, and containing some albumen. One ounce of brandy every third hour. Takes milk, beef-tea, and soda water well.—14th: Condition unaltered; little sleep at night, but obtains some in the daytime. Temperature 100°; pulse 116; respiration 40. Bowels moved eleven times; abdomen much less distended, and there is but little pain; rigors continue, and are of increased duration and severity, the cold stage lasting about ten minutes. The following figures show the fluctuations of temperature noted in the course of the twenty-four hours:—At 9 A.M. 101·8°; at 3 P.M. 99·8°; at 6 P.M. 101°; at 7.30 P.M. 102·8° during the cold stage of a rigor; 8 P.M. 104° during the hot stage; at 9 A.M. 99·8°. Ordered quinine in five-grain doses three times daily and ten grains of kino and opium powder at 8 P.M.—15th: No alteration in symptoms, but increased weakness. Pulse 120, small but regular. Diarrhœa and sickness less. Passed a good night.—16th: Weakness and emaciation are increased; drowsiness more marked. The patient lies on the right side chiefly and does not appear in any pain.—17th: Steadily sinking; slight delirium.—18th: Died quietly at 5 A.M. this morning.

Autopsy, thirty hours after death.—The body was emaciated and jaundiced, but well developed. Lungs: Some old pleuritic adhesions together with recent lymph over the lower third of the right lung, which was congested. No abscesses and no trace of tubercle in either lung. Heart natural. Abdomen contained about half a pint of straw-coloured fluid. Evidence of subacute peritonitis of some duration throughout, but most marked over the cæcum. Intestines bound together rather firmly, and omentum and mesentery much thickened. Examination of intestinal tract showed ulceration within the appendix vermiformis, which was much thickened, congested, and of a dark colour. It was dilated into a small abscess cavity the size of a walnut, near its termination, and perforation appeared to have occurred about the middle. No foreign body could be detected. Cæcum and ascending colon were congested, but there was no ulceration. Small intestine also slightly congested and the glands were thickened, but without ulceration. The mesenteric glands were enlarged, and the seat of numerous small abscesses. Liver was studded throughout with abscesses, varying in size from a pea to (in one case) a small orange. The largest one contained about two ounces of thick creamy pus, and was seated in the posterior and inner part of the right lobe. This portion of the liver was enlarged in comparison with the rest of the gland, which was only slightly increased in size. Gall-bladder empty and contracted; on passing a probe (with some difficulty) this condition was found to be due to an abscess pressing on the duct, and thus preventing the flow of bile. Stomach much distended and containing a large quantity of bilious fluid. Spleen and kidneys slightly congested, but otherwise healthy.

Kensington Barracks, W.

ON OTOLOGY IN RELATION TO GENERAL MEDICINE.[1]

BY H. FRENCH BANHAM, M.A., M.D. CANTAB.

IN calling attention to ear symptoms and ear diseases as they occur in connexion with ordinary medical practice, I shall first deal briefly with those cases in which, the organ of hearing being perfectly healthy, the well-known ear symptons of tinnitus, giddiness, and deafness arise. By tinnitus is to be understood subjective sounds having no relation to any external cause. In regard to auditory hallucinations I need say but little; they form frequently the prelude to, or exist as symptoms of, serious psychical disease; they occur also as aurae epilepticæ, and in the latter case they are said to begin as crude sensations of a confused noise, which soon resolves itself into musical sounds or vocal utterances. I have of course met with cases where auditory aurae have been complained of, but of the interesting mode of development that I have just mentioned I have met with no confirmatory evidence. There are certain persons of a highly sensitive neurotic temperament in whom ear disturbances arise as the result apparently of simple excitement. I was called lately to a case of this kind, occurring in a person of more than ordinary intellectual culture, and who had previously been under my care (as had also other members of her family) for neuralgia. On returning from church one Sunday evening, the service having been one of more than ordinary interest and excitement to her, she was seized with a ringing in the ears and with giddiness of such a pronounced character that she was unable to ascend the staircase without assistance. She told me that she had had previously similar, but less severe, attacks. When I saw her the only peculiarity that I could detect was undue distinctness of hearing on the affected side. She had slept badly for a day or two previous to this seizure, but was by no means in an exhausted condition. She benefited greatly by bromide of potassium, and the only similar attack that has occurred since was a few days back, when she was excited by the unexpected visit of an old friend.

In reference to the causes producing tinnitus, quite apart from any actual disease of the ear, it may be said that their name is legion, although a great many are no doubt due to disturbances of the circulation. This is illustrated by the circumstance that cardiac diseases, aneurysms of the arteries, and especially those in the immediate neighbourhood of the ear, the pressure of tumours upon the internal jugular vein (influencing indirectly the discharge of blood from the labyrinthine veins), and the wearing of garments constricting the neck, will frequently give rise to noises in the head. Mr. Field called attention to its existence in some cases of Bright's disease, and attributed it, and perhaps with truth, to increased arterial tension. It is also occasionally present in anæmia, gout, in lithæmia independently of gout, and in cases of nervous prostration accompanied with phosphatic alkaline urine. Some cases are reflex in origin, and are due to irritation of the digestive organs or of the pharynx, gums, and teeth, &c. Tinnitus assumes a vast variety of characters, such as hissing, ringing, cracking, buzzing, rushing; and these sounds are sometimes rhythmical, synchronous with the pulsations of the heart, and often closely resembling cardiac bruit. The rhythmical variety is no doubt due to some form of arterial disturbance, but it is not necessarily a symptom of any gravity, and may arise temporarily from excitement, errors of diet, and especially the indiscreet use of alcohol.

The question of deafness apart from ear disease is one of great interest and importance, and should find a conspicuous place in such a paper as this. The subject, however, is one that cannot be satisfactorily dealt with in a few words, and therefore I shall be compelled to content myself with little more than an enumeration of the conditions under which it arises. It may be of interest to mention that it was present and formed an important symptom in a case of glioma of the pons that I brought before the members of the Sheffield Medico-Chirurgical Society last winter, and upon which a post-mortem examination was afterwards made; and it exists also in a man with a cerebral tumour now an in-patient at the Sheffield General Infirmary. It is confessedly difficult to distinguish between labyrinthine and cerebral deafness; but in the cases just referred to the diagnosis was aided by concomitant symptoms, and the presence of optic neuritis. Without any primary disorder of the labyrinth deafness may occur from disease affecting the brain and its membranes, involving the acoustic centres, the nucleus, root or stem of the auditory nerve.

I wish now to call attention to those cases of ear disease occurring in the course of other maladies, or which arise as a consequence of certain morbid conditions of the system. We might perhaps classify these disorders in the following manner according to their causation: (1) Reflex; (2) extension of morbid (inflammatory) processes; (3) certain constitutional conditions, as syphilis, tuberculosis, which lend to the structures of the ear a special vulnerability.

1. Under the first of these heads may be named acute catarrh of the tympanum, which is liable to arise in infancy and often in association with painful dentition. It is not

[1] A paper read before the Sheffield Medico-Chirurgical Society on Nov. 20th, 1884.

unlikely that the connexion of the otic ganglion with the inferior dental nerve on the one hand, and the carotid plexus on the other, by which the blood-supply to the tympanum is influenced, may explain the frequency with which the morbid conditions that I have referred to are associated the one with the other. In many cases, in strumous or otherwise unhealthy subjects, the ear disease, brought about in the manner I have stated, plays only an intermediate part, and the inflammation passes from the muco-periosteal lining of the tympanum to the dura mater which is continuous with it through the petro-squamosal fissure, a fissure which although more or less closed in later life is patent in infancy. This extension that I have named may possibly go far not only to explain many of the eclampsic seizures of infancy during dentition, but also many of the inflammatory ear attacks by which one or both ears are practically destroyed. Cases are also recorded of sympathetic hyperæmia of the ear in sympathy with the digestive organs and the uterus.

2. There is probably no more frequent cause of disease of the tympanum than that of extension to it of inflammatory processes from the pharynx to the Eustachian tube. Any one of the diseases of the middle ear may originate from pharyngitis occurring in association with measles and scarlet fever. The most obstinate purulent diseases of the ear arise from scarlet fever, in which frequently the tympanic membrane is destroyed and the functions of the labyrinth so far affected as that the patient is rendered deaf in one or both ears, and with the dreadful possibility also at any time of mastoid disease, caries, pyæmia, or severe cerebral complications arising. I may here add, as showing the serious importance of these suppurating diseases of the ear, that of seventy-six cases of cerebral abscess collected by Gull and Sutton, twenty-seven, or more than one-third, were traceable to ear disease.

3. In regard to the important part which is played by various constitutional conditions, the strumous, the tubercular, the syphilitic, and the gouty, in the causation of ear disease, time will not allow me to say much. Birch-Hirschfeld, in his article on Scrofula in Ziemssen's "Cyclopædia of Medicine," remarks that "scrofula is at the bottom of the largest number of cases in which weakening and destruction of the function of hearing have taken place during the age of childhood," and that "the large number of scrofulous individuals found in deaf and dumb asylums is to be explained by these facts." There is, I think, no doubt that a very large proportion of the intractable cases of ear disease following scarlatina and measles are due, in the main, to a scrofulous diathesis. Syphilis may affect the organ of hearing in many ways. Condylomata or ulceration of the external auditory meatus may be due to it, or a mucous catarrh of the middle ear may result from an extension of the throat affection along the Eustachian tube.

Let us for a moment consider in a general way of what the sensory nervous supply to the ear consists. The auriculo-temporal division of the fifth distributes branches to the external canal and the outer layer of the tympanic membrane, and the auricular branch of the vagus also ramifies in the external meatus. Within the tympanum is situated the tympanic plexus, composed of fibrils from the glosso-pharyngeal, sympathetic, and fifth nerves, and the chorda tympani passes through the drum cavity in a more or less exposed condition. It requires only the recognition of the elaborate nervous connexions of the ear to see at once that it is an organ disease or irritation of which might be most prolific in the development of reflex phenomena. At present we have little data to guide us to the actual frequency with which nervous reflex symptoms in infancy and adult life are due to affections of the external auditory meatus, the middle ear and the labyrinth. Cases, however, have been recorded of epilepsy and other disorders depending on such affections, and I can add to the number from observations of my own. The attention of the profession generally has scarcely been sufficiently directed to this subject. While speaking of the effects transmitted to the ear from difficult dentition I incidentally drew attention to the close relation existing between the dura mater of the brain and the muco-periosteal lining of the tympanum, a relationship which, though always intimate, is especially important in early life while the petro-squamosal fissure exists. It is essential that this anatomical connexion be borne in mind in this part of my paper, while I am dealing, however cursorily, with the secondary effects of ear disease. Under any circumstances the dura mater is separated from the lining of the tympanum by a very thin layer of bone, so thin as to be almost transparent, and perforated abundantly for the passage of vessels. Again, lying in close proximity, and separated only by thin osseous walls from the tympanum, are the internal carotid artery, the lateral sinus, the internal jugular vein, and the superior petrosal sinus; and here again the thin bony septum is alike perforated by vessels. The last anatomical fact that I will mention is that the upper part of the tympanic space communicates directly with the mastoid cells. The facts that I have alluded to painfully suggest that disease once established in the middle ear must expose the sufferer to risks of such terrible complications as embolism, thrombosis, phlebitis, septicæmia, cerebral abscesses, purulent meningitis, and acute tuberculosis. That these serious, and indeed fatal, complications arise in connexion with suppurative disease of the middle ear is well known, but whether the fact is recognised sufficiently is, I fear, doubtful. What proportion of cases undiagnosed, or regarded from the want of fuller knowledge as being typhoid or brain fever, are really due to some of the foregoing? The question, from its nature, cannot be answered; but I surmise that the proportion is not an inconsiderable one. These cases are no doubt often very obscure, and even when pyæmia is recognised the connecting link of ear disease is often overlooked. In the last report of the Clinical Society eight fatal cases are recorded of brain disease arising from disease of the ear.

I cannot help thinking that even a partial consideration of ear symptoms and ear diseases brings with it the reflection that the ear is by common consent too much removed from the general practice of the physician and surgeon. Specialism has advantages and disadvantages, and I desire to be no more alive to the one than to the other. In certain departments we are indebted to specialism for many valuable instruments of diagnosis and treatment; but it has the drawback of obscuring the far-reaching influences which bear upon the organ to which the specialist devotes himself, and of closing the eyes of the general practitioner to the initial cause of many of the serious secondary and reflected symptoms that he is called upon to treat. It is a serious thing to lose sight of the fact of the integrity of the human body and of the mutual interdependence of all its parts. Error of the kind I allude to is excusable on the part of the ignorant; but the medical profession (enlightened students, and observers of nature, as we ought to be) should be scrupulously careful in no way to foster such mistakes. For many operations no doubt fingers and eyes untrained to the special work are a disadvantage; but if we travel too far along the lines of specialism we risk more serious dangers. The more general the knowledge the more accurate should be the diagnosis; the whence and whither of any disease should be better traced out before the eyes of the man whose vision is not too limited. It is, however, of vital moment to the advantageous employment of this wide-spread knowledge that there be a dexterous manipulation of every instrument for ascertaining the precise nature and extent of the local mischief; and so long as there is failure here, the specialist will be still supreme. I have already inferentially intimated the fact that I believe in specialism, so far as regards those operations where peculiar manipulative skill is necessary, and roughly speaking where very small instruments are required to be handled. Specialism to this extent is necessary, but beyond this it need not extend. According to the bent of a man's mind he may naturally have a special liking for certain subjects, but for anyone deliberately to confine himself exclusively to a small specialty, and for the profession to encourage him in this, is to sanction a system fraught with danger to the best interests of the public. Whence arises what I may venture to call the evil of a mischievous specialism, and how is it to be met? The ignorance of the public is largely the pabulum on which it fattens, but who is responsible for its existence?

I would respectfully submit that I think in our medical schools the specialties are too far separated from the ordinary routine work of the hospital. Diseases of women and children, of the skin, of the eye, ear, and teeth are so far removed that a student may obtain all his certificates and present himself for his final examination without ever having attended in any way the practice of these departments. Again, I would venture to express the opinion that the examining boards unduly favour specialism by eliminating most or all of these subjects from their examinations, and at the Colleges of Physicians and Surgeons I believe a candidate would feel himself hardly dealt with if he were called upon to diagnose a case requiring the use of the ophthalmoscope, the laryngoscope, the tuning fork, or ear speculum.

ON THE

TREATMENT OF URETHRAL STRICTURE.[1]

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SINCE the time of John Hunter and Sir Everard Home the rational treatment of stricture of the urethra has steadily but surely advanced. This I think will be readily allowed after perusing a work on "Strictures in the Urethra" by the latter surgeon, published in the beginning of this century. Then in cases where the passage of a bougie was an impossibility, it was the practice to cauterise the stricture with nitrate of silver by means of a bougie armée. One case is recorded where this procedure was repeated 1258 times in the space of fifteen years, ending singularly in a fortunate result—i.e., the passage of a bougie into the bladder. But this treatment was an advance upon the method which preceded it, and which consisted in pressing a bougie against a stricture, the object being to cause ulceration followed by perforation.

[The views of Otis on the calibre of the normal urethra were here reviewed, the author stating that he entirely coincided with the conclusions of this surgeon. Attention was drawn to cases of chronic urethral discharge depending upon a small or contracted meatus in which all the symptoms had cleared up after freely incising the orifice. The fact of a penile fistula being due to a stricture which readily admitted a No. 22 French bougie, and which consequently had not been diagnosed, was instanced as showing how important was the recognition of anterior strictures of large calibre. In classifying strictures, Dittel's was mentioned as being one of the best, though for practical purposes the following was recommended. Setting aside contractions due to spasm, organic strictures were divided into two chief classes: anterior and posterior, or strictures of the penile and of the fixed urethra, these being either of large or of small calibre; passable or impassable, eccentric or concentric. Traumatic, complicated, and congenital were mentioned as subvarieties. The so-called "temper" of strictures was dwelt upon as greatly influencing the subsequent treatment.]

The vast majority of stricture cases which come under notice are submitted, at all events, I suppose, in the first place, to gradual interrupted dilatation, and rightly so, as this is the simplest and safest of all methods. There is no doubt that a cure follows in a certain proportion of these cases, and relief in many more. In private practice most cases are amenable to this treatment; in hospital, however, one meets with more aggravated examples of this disease, so that the percentage of cases in which other means have to be resorted to is larger. Recent strictures, when not at the meatus, are most benefited by this. When the obstruction is due to a wart or bridle—Dittel's first class of stricture—one or two passages of a bougie may suffice for a cure. Some years ago a gentleman came to me with the following symptoms: narrowing and twisting of the stream, increase in frequency of micturition, and gleet. I passed a bougie very gently, but this was followed by two or three drops of blood; after repeating this once or twice, all his symptoms disappeared. I suspect his trouble was due to what old writers called a caruncle; in other words, a wart or outgrowth of granulations, which was broken down and removed by the passage of the bougie.

Respecting the treatment by gradual interrupted dilatation a good deal of one's success will depend upon the kind of bougie used and the way of using it. For this purpose there is no better instrument made than the French bougie olivaire.

In cases of stricture of large calibre in the penile urethra I am now trying Otis's method. With his dilating urethrotome the contracted parts of the canal are dilated and cut until it is restored to its normal dimensions, which have been previously ascertained by means of the urethrometre. Should there be a stricture at the bulbo-membranous junction, it is left for future treatment if necessary. I say advisedly "if necessary," for this subpubic stricture which may be impassable is sometimes due to spasm dependent upon the anterior strictures. Otis and his followers believe that this is usually the case. I am not prepared to go so far as this, but I certainly think that before we subject a patient to the risks—for though small they are real—of a cutting operation in the fixed urethra, we ought to eliminate all chance of this being spasm due to co-existing anterior contractions. I have had two or three cases where this treatment has been attended with the best results, others which are still under treatment are making satisfactory progress, though in one case epididymitis and in two urethral rheumatism has been set up. It must be borne in mind, however, that these cases were treated as out-patients.

So much, then, for strictures in the penile urethra. Concerning those in the deeper portion, which are often of small calibre, with the orifice situated eccentrically—accompanied, perhaps, by a good deal of fibrous thickening—they are frequently impassable to most varieties of instrument. To treat such cases successfully one needs a selection of fine filiform gum elastic bougies, either straight or with the ends spirally twisted. It is to this little instrument I would especially direct attention. Armed with one or two of this form of bougie, one may enter almost any stricture, however eccentric or tortuous it may be. These bougies are made with a screw attached in order to act as pilots or conducting bougies to catheters or some form of urethrotome or divulsor. Having in a given case succeeded in passing a guide, several courses are open to one. It may be left in for a time until the stricture dilates, admitting a larger instrument; this being the method known as continuous dilatation. Personally I do not mind leaving a bougie in the urethra for an hour or two when it is necessary to dilate a stricture for the purpose of passing a urethrotome; but to treat a stricture by tying in a bougie for days does not commend itself to me. I have seen it set up cystitis, which has at once been relieved by performing an internal urethrotomy. It also not unfrequently causes urethritis, abscess, and epididymitis, accompanied by considerable constitutional disturbance. Again, a catheter having a screw attached may be made fast to the "pilot," and pushed on into the bladder, thus giving relief in cases of retention. If the stricture be of long-standing, and at all extensive, the guide bougie being *in situ*, I think it is as well to perform an internal urethrotomy at once, after the manner to be described immediately; but if there is any reason to believe that the stricture is a dilatable one, or for the sake of procuring immediate relief without having recourse to a cutting operation, Harrison's modification of Holt's divulsor might with advantage be employed. By this instrument is accomplished what may be called "rapid dilatation," neither the stricture nor the urethra being ruptured, as is the case with Holt's instrument. I used this dilator quite recently in the case of an old man who came to St. Peter's with incontinence, dribbling by day and night. He could only micturate in drops. There were several strictures, one being subpubic. Through this I could pass nothing, until I took a fine corkscrew guide bougie which fitted Harrison's dilator. There was no doubt that the sooner this old man was able to empty his bladder the better for him, so the pilot being in position I screwed on the dilator and passed the three smallest bolts without causing much pain. On removing the instrument I asked the patient to pass urine. He was delighted to find that it came in a stream; though small, it was a better performance than he had accomplished for many a long day.

[The method of performing internal urethrotomy by means of Teevan's modification of Maisonneuve's urethrotome was here described, and the practice of tying in a catheter after the operation condemned.]

I have performed internal urethrotomy between twenty-five and thirty times, and have assisted in about a hundred more. The results I have obtained have been very good, as all my patients have been able to micturate in a good stream, other symptoms which before had troubled them being completely relieved. I am not content unless I can pass a No. 22 bougie or catheter after the operation through the deep urethra; and this size must be maintained, or sometimes increased. If there are anterior strictures large in calibre, they are, as before said, best dealt with by means of dilating urethrotomy. I find, on looking through the register, that since I have been attached to St. Peter's Hospital—i.e., for the last three years—we have had 142 cases of internal urethrotomy, with three deaths only. Two of these cases died from causes, not likely to occur again; and in the third I do not think that death was due to the operation, at least not directly. I will briefly narrate these cases.

In the first case, that of a man aged thirty-five, who had

[1] Read before the West London Med.-Chir. Society, Jan. 2nd, 1885.

suffered from stricture for fourteen years, and had undergone both supra-pubic puncture and perineal section, there was some difficulty in passing a catheter after the urethrotomy, so an instrument with a larger blade, No. 26 instead of No. 22, was used for the second time. A rigor followed soon after the operation, and the patient died collapsed on the following morning. The second fatal case was one of traumatic stricture from which the man, aged forty-four, had suffered for twenty-six years. In this case also difficulty was experienced in passing the catheter after the section, in fact it is doubtful whether an instrument was passed into the bladder after the urethrotomy. A severe rigor occurred after the operation, followed by suppression of urine. From this he recovered sufficiently to get up daily. This was a fortnight after the operation. Four days afterwards he suddenly died. The post-mortem revealed suppurative nephritis. The third case—the only fatal one out of sixty-five operations during the departed year—died from shock due to hæmorrhage which was severe enough to call for external urethrotomy. How this arose I cannot say. It is the only case in which I have seen bleeding worth mentioning follow the use of this instrument when the blade is of a size to cut to 22 of the French scale.

Let me here mention a fact which has struck me, and which is that in the three cases just recorded some difficulty was met with in the after introduction of a catheter; I have also noticed that this has been the case nine times out of ten where suppression has followed. I would suggest that where the catheter does not pass easily, it is better to desist or even reinsert the urethrotome than use any force or prolonged manipulation. Immediately before or after the operation it is a useful practice to give two grains of quinine in a little hot brandy-and-water, in order to prevent shock and rigors. Harrison of Liverpool recommends three minims of aconite for this purpose, but although I have given it an extensive trial, I have not found it of much use. Anæsthetics are not as a rule required, though, if the stricture is likely to be difficult to cut through, ether should be given.

Cocaine bids fair to be of great use in urethral surgery; at present its high price precludes its being generally employed in hospitals.

After the operation it is important that the patient should be kept warm between blankets, with hot bottles to his feet; the sooner a free diaphoresis is established the better. The chief thing to guard against is urethral fever, ushered in by rigors, and accompanied sometimes by suppression. There is generally a rise of temperature after this operation, but if the kidneys are acting no alarm need be felt. I have known the temperature to run up to 104° more than once, and yet be normal after the lapse of twenty-four hours. If, however, suppression occurs, prompt remedies are necessary, together with careful and assiduous nursing. There is a patient of mine in the West London Hospital at the present time who is recovering from this complication, thanks to Mr. Menzies, the house-surgeon, and to the careful nursing he has had. The best means at present known for combating this condition is the hot-air or vapour-bath, with large doses of digitalis. Dry cupping to the loins and turpentine enemata have also proved most useful. The patient's strength must be supported, for which the half-hourly administration of brandy, &c., may be necessary. The diarrhœa and vomiting which are sometimes present should not be stopped unless excessive; the alimentary canal is simply doing vicariously the work of the kidneys.

The instrument the use of which has just been described cuts from before backwards, as do also those of Voillemier, Hill, Maisonneuve, Gouley, and Harrison. As I prefer Teevan's, I will not take up time by describing the others. Of the instruments which cut in the opposite direction the best are Watson's and Civiale's, the latter, or Sir Henry Thompson's modification, being the better known of the two. In his recent lectures at the Royal College of Surgeons Sir Henry extolled its use. It has, however, certain drawbacks, some or all of which have been recognised by the following authorities—Coulson, Gouley, Berkeley Hill, Teevan, and Harrison.

Touching the splitting of strictures by Holt's method, my experience has been limited to cases which have relapsed after this treatment, and of which I have met with not a few. Of these I may say that the strictures are of a more severe form than those which have not been submitted to operation. Between the years 1870 and 1880, 115 cases were split in the Westminster Hospital, with three deaths, according to Mr. Davy. Comparing these statistics with those I have given, internal urethrotomy as performed at St. Peter's undoubtedly carries off the palm, although Holt's method bears favourable comparison with internal urethrotomy as performed at University College Hospital; for Erichsen in his new edition mentions that in seventy-six cases during five years there were four deaths, eight cases of perineal abscess, besides extravasation in one and epididymitis in four cases.

As to external urethrotomy, I will here only say that as this is a more serious operation than that of internal, it ought to be limited—except possibly in some cases of traumatic stricture, accompanied or not by urinary fistulæ—to cases of impassable stricture, which ought nowadays to be but few and far between, looking to the great improvement which has of late years taken place in bougies and other urethral instruments.

In conclusion, I would direct attention to the importance of being able to recognise the presence of slight strictures—i.e., strictures of large calibre situated in the penile urethra,—such a condition being quite sufficient to keep up a gleet, to cause irritability of the bladder and other urinary troubles, not forgetting spasmodic stricture in the deep urethra. If this anterior stricture of large calibre admits of treatment by bougie—i.e., if we are able to restore the urethra to its normal size by this means,—well and good. But if not, no harm, but immense benefit, will be derived from dilating urethrotomy in careful hands. For organic strictures in the deep urethra, where dilatation either cannot be resorted to or does not succeed, I would recommend internal urethrotomy with Teevan's urethrotome.

A CASE OF CHOREA OF FIFTEEN YEARS' STANDING IN A MAN AGED FIFTY-SIX.

BY J. C. M'LEARN, M.D.,
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SOME attention having been lately given to the subject of chorea in the aged, I hope that the following case may be of interest.

T. M——, aged fifty-six, a gardener, was admitted into this infirmary on June 3rd, 1884, suffering from chronic chorea. His parents, brothers, and sisters were all healthy, and there appears to have been no rheumatism or nervous disease in the family. He is a widower with two sons, aged respectively fourteen and twenty-two years. The elder is healthy, but the younger is said by the friends to be fidgety and to have involuntary movements of the feet and shoulders, especially noticeable whilst sitting reading. He has not had rheumatism, has the heart sounds normal, and is to all appearance in good health. The patient, although born in Scotland, has resided about London for the greater part of his life, and has never been abroad. He had always enjoyed good health, has been a very temperate man and a non-smoker. He has not suffered from acute rheumatism, fits, or gout, but had been troubled with muscular rheumatism, which took the form of lumbago. About fifteen years ago he became "nervous," walked staggeringly, had startings of the hands, and, when sitting, shuffling of the feet, but in a slight degree. These symptoms, the onset of which was very gradual, and for which no cause has been assigned, continued with but slight increase until about four years ago, when his wife died somewhat suddenly after three days' illness. This event caused him to appear dazed for a time, and greatly aggravated the symptoms—so much so that he has never been able to work since, and has from that date continued to get worse. The patient is a man of medium height, fairly nourished, with greyish beard and bald on the top of his head. On looking at him as he lies in bed, he presents the appearance of constant irregular movements which are typically choreic. These movements affect the arms and head more than the trunk and legs. The head is turned from side to side, and frequently lifted from the pillow as though he were trying to look at his feet. The facial muscles, especially those around the mouth and the occipito-frontalis, are frequently in action. The arms, particularly the right, are constantly in motion, being pushed down and retracted, the wrist and elbow being lifted from

the bed, and the pronators and supinators brought into action. The fingers are extended and flexed in turn, the thumbs also performing these movements in the same jerky manner. The shoulders partake in most irregular motions, and are, with the upper part of the trunk, frequently lifted off the bed. The legs and feet are also affected, but in a less degree. All these movements, which in character are irregular, jerky, fidgety, and often seem half purposelike, may occur in a few seconds, many of them being synchronous, and they are almost incessantly repeated while under observation. They stop only during sleep, but are lessened in frequency and severity when no one is near, and are increased again when any one notices him or speaks to him. He generally lies during the day with a handkerchief over his face, so that he may not be disturbed nor have the movements increased by seeing the other patients walk about. On asking him a question he tries hard to reply, but some little time usually elapses before he can articulate, and then not at all distinctly, though sometimes he will pronounce several words well and rapidly. His tongue is not protruded involuntarily, and when put out is not withdrawn with a jerk. He answers questions rationally, but his memory is not good. He is also rather irritable, and gets greatly excited at trifling things, but he has no dementia. He is somewhat deaf, but his eyesight is good, and he reads a great deal. Ophthalmoscopic examination showed the discs to be normal, but the veins were swollen. He perspires frequently and profusely, and complains of being made warm by the movements, so that he only wears one blanket whilst his fellow patients use three. His temperature has been often taken, but has only reached as a maximum 99·6°. The tongue is clean, and he eats his diet, an ordinary meat one, fairly, feeding himself, but should anyone speak to him whilst doing so a mishap is almost sure to occur. His bowels are regular, and he has not been sick or had vomiting since his admission. He has perfect control over both bladder and rectum. The pulse is about 80, and there is no cardiac murmur, the heart sounds being normal. The respiration ranges from 14 to 18 per minute, and is broken and irregular. He cannot stand alone, and when trying to walk with assistance his gait is shuffling, jerky, and halting, the heel usually touching the floor first. He has diminished plantar reflex on tickling the soles. Ankle clonus is absent, but the patellar reflexes are exaggerated. He often complains of headache, and of slight pains in the calves of the legs, and suffers from a feeling of weariness from the muscular movements, which otherwise are painless. The cutaneous sensibility is not impaired. His urine averages about twenty-two ounces per diem, and has a specific gravity of 1034. It is turbid, which microscopical examination shows to be due to urates. It is acid in reaction, has no albumen, only a trace of sugar, and no indican. The urea is diminished in quantity, being only 242 grains per diem. The movements have not improved under treatment. He has had arsenic and iron for some months, followed by bromide of potassium and tincture of conium, and lately sulphate of zinc was ordered in three-grain doses. The ether spray has also been applied over the spine.

Remarks.—The case seems to carry out the view of Charcot that this form of chorea is incurable, but is at variance with his opinion that it is always associated with dementia. The following points may be noticed:—1. The movements have existed for fifteen years. 2. The movements were much increased by an emotional cause—i.e., the shock caused by his wife's death. 3. The absence of heart disease and of rheumatism, except the muscular variety. 4. The diminution of urea, though the profuse sweats might partly account for the small quantity present in the urine. 5. The probability that the son may at some future time be attacked by chorea in a marked form.

Holborn Union Infirmary.

CITY OF LONDON TRUSS SOCIETY.—The annual general meeting of the governors of this Society was held on the 4th inst., when it was stated that the number of patients relieved in 1884 was 9248, the highest ever recorded by the Society, and 122 more than the number relieved in 1883, bringing up the total of patients relieved at the close of last year to 405,426. The number of instruments supplied was 9305. The income amounted to £5810, exclusive of the balance brought forward from 1883, as against £3990 in the previous year.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas at morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

MANCHESTER ROYAL INFIRMARY.

TWO CASES OF SPINAL INJURY.

(Under the care of Mr. THOMAS JONES.)

THE two cases of spinal injury which Mr. Thomas Jones records will be found very interesting. The first case, one of dislocation in the lumbar region with paralysis of the lower extremities, was apparently unaccompanied by fracture, no evidence of it being obtained from manipulation of the part under anæsthetics, either before or after reduction; nor was there the line of hyperæsthesia commonly found in fracture at the junction of the paralysed and unparalysed parts, and which was noted in the second case of injury to the cervical region, where from the form of the vertebræ, dislocation, though rare, is more often uncomplicated by fracture than in any other region of the spine.

CASE 1. *Dislocation of the Spine in the Upper Lumbar Region; Complete Paraplegia; Extension of the Spine under Chloroform; Recovery; Remarks.*—William B——, aged twenty-three, was admitted on May 8th, 1884. While unloading timber, some heavy pieces came violently in contact with the posterior and lower part of the neck. At first he was driven into a sitting posture, and then the back was bent to such an extent that the forehead touched the knees. When extricated from this position, a deformity of the back existed, and the patient was not able to move his legs. He was taken to the infirmary without delay, and within an hour of his admission Mr. Jones saw him with Mr. Pollard, then the resident surgical officer. On examining the back, a large, soft, fluctuating swelling was found occupying the lumbar region. Through this swelling the spines of the vertebræ could be detected on deep pressure. By tracing them from below upwards an abrupt depression between the first and second lumbar vertebræ was found, and at the bottom of the depression the spines of the vertebræ above could be felt. The continuity of the column was therefore interrupted in the upper part of the lumbar region by separation of the first from the second lumbar vertebra. It was also noted that the patient bore unmistakable evidence of severe shock, and that there was complete motor and sensory paralysis in both lower extremities. The upper limit of the paralysis was not well defined. From the symptoms it was concluded that a partial dislocation had been produced by extreme flexion of the spine, and it appeared very desirable, if possible, to reduce the deformity and restore the suspended functions of the cord. With this object the patient was placed under the influence of chloroform and gentle extension of the spine made. This was done by means of two long towels fixed to the thighs immediately above each knee, while an assistant steadied the chest and upper part of the spine. During the progress of the extension the patient was lying upon his left side, so that any change in the position of the vertebra could be more readily witnessed. After a few seconds' extension a sudden jerk was experienced, and the vertebra regained its position with an audible click. When the action of the anæsthetic had passed off, it was found that motion and sensation in both legs had been restored to a considerable degree. The restoration was more complete in the right limb. The patient complained of much pain in the region of the injury, which was decidedly relieved by a quarter of a grain of morphia hypodermically administered.

May 9th.—The patient is able to move both legs; sensation very good. There are, however, patches of numbness, which are more extensive on the left than the right side. Retention of urine; catheter consequently employed, and urine drawn off three or four times in the twenty-four hours.

11th.—Area of impaired sensation on the left side reaches as high as the middle of the thigh. The urine is alkaline and

ammoniacal; bladder washed out daily with a weak solution of boracic acid. Several bullæ have made their appearance on the dorsum of the left foot. These may possibly be attributed to the application of strapping and bandage, with the view of applying a weight to steady the limb, or they may be indicative of trophic changes.

14th.—No more bullæ have appeared. Numbness, less marked, is now confined to the left thigh. Has much greater power in the limbs, and is now able to lift the left leg off the bed. Has considerable pain when the bladder is distended. Troublesome constipation, with pain in the rectum.

June 15th.—Gradual improvement since the last report. A Sayre's plaster jacket applied. While this was being done patient felt faint, and in the evening the temperature rose nearly two degrees. Urine, now faintly acid, contains a small amount of albumen.

20th.—Faradaic current to the legs, muscles react readily. Patient got up for the first time, but could not stand without assistance.

22nd.—Complains of headache and pain in the back. He looks ill. The temperature reached 102° in the morning, and 103° in the evening.

26th.—Faradaism continued. The muscles supplied by the anterior crural nerve on the right side, and by the sciatic on the left, do not react so readily as the others.

July 1st.—The febrile attack, which has lasted for nearly ten days, has subsided; the patient expresses himself as feeling much better, and as being free from pain.

12th.—Each time the limbs are galvanised pain of a severe character is experienced, especially in the legs.

15th.—Has had another relapse, the temperature again reaching 103° on two occasions. The galvanism is suspected of being the cause of this attack. Plaster jacket removed; spines of second and third lumbar vertebræ prominent.

23rd.—The patient has passed a good night. The temperature normal. For the first time he is able to pass a small quantity of urine, but this can only be accomplished by the employment of considerable force. Daily washing of the bladder is continued.

Aug. 2nd.—Still another relapse, and this time no likely cause can be discovered. This attack lasted five days, and during its progress the highest temperature, 103·4°, was recorded. He complained of intense headache and some sickness; the face was flushed and the pulse very rapid (120); there was also pain in the lumbar spine, extending into the dorsal region; great hyperæsthesia over the same parts, and very severe pain in the lower limbs, especially in the knees. His urine contained phosphates and a considerable quantity of pus.

8th.—The temperature again normal. The pain has ceased, except in the sole of the left foot, where he has very intense shooting pains and great hyperæsthesia.

16th.—Renewal of the pain in the back; temperature last evening 102°; is normal again this morning. The electric reactions of the muscles of the legs were as follows:—The right thigh (anterior half)—weak current: Vastus internus, rectus, and sartorius contract less strongly than vastus externus. Left thigh (anterior half)—weak current: Rectus and vastus externus contract powerfully; sartorius contracts readily; vastus internus also contracts readily, but not so well as the vastus externus. Right thigh (posterior half)—weak current: Semi-tendinosus and adductors contract very feebly; semi-membranosus and biceps contract moderately. Left thigh (posterior half)—weak current: Semi-tendinosus and adductors contract fairly well; semi-membranosus and biceps only weakly. Right leg (anterior half)—weak current: Extensors and peronei contract readily. Left leg (anterior half)—weak current: Tibialis anticus contracts only slightly; peronei and extensors less than right leg. Right leg (posterior half)—weak current: Flexors contract moderately well. Left leg (posterior half)—weak current: Flexors contract feebly. There is slight anæsthesia behind the left external malleolus and in the sole of the left foot. Tactile sensation delayed in the outer side of the middle and lower thirds of the left thigh. Pressure on the sole of this foot causes pain. There is hyperæsthesia of the three outer toes of the left foot. Along the front and inner surface of both tibiæ near the anterior edge there are hairless patches. These are about an inch and a half in length by a quarter of an inch wide. Previous to the disappearance of the hair some redness had appeared.

24th.—Temperature last night rose to 102·2°, while the pain and tenderness in the back returned. There was also pain of a shooting character in the left leg and foot. There has never been any girdle pain. Temperature this morning 98·6°.

Sept. 8th.—Has been quite free from pain the last few days. With a little assistance he is now able to stand, and to walk a few yards. Has had a poroplastic felt jacket made to fit the back. This gives him great support. Hyperæsthetic spot in left foot still present. Complains of a feeling of constriction in the left leg on flexing the foot.

16th.—A relapse last night. Temperature 103°. Had distinct rigors. Return of the shooting pains in the back and left leg. This, which was the last febrile attack, lasted two days. From this time the patient began to make a more decided improvement, which has steadily and uninterruptedly continued up to the present time. On Oct. 15th he left the infirmary, after a stay of five months, and went to the convalescent hospital at Cheadle. Since his discharge he has made periodical visits to the infirmary.

Remarks by Mr. JONES.—In this case the spinal displacement was produced by extreme flexion of the spine, the result of a heavy weight falling upon the upper part of the column. The effect of this would be to rupture the ligaments between the spinous processes and the neural arches, and so allow incomplete separation of one vertebra from another. The ease with which replacement took place was certainly remarkable, and the sound which accompanied it was so distinct as to be audible to all the bystanders. The alkalinity of the urine became apparent on the third day, and it was thirty-five days before it regained its acidity. The expelling power of the bladder is still wanting; even now, eight months after the accident, he is compelled to employ a catheter. It is difficult to offer a reasonable explanation of the recurrent febrile attacks; they may possibly have been occasioned by a slight transient inflammation of the spinal meninges at the seat of injury. The trophic changes observed were not numerous. The bullæ began to appear at the end of forty-eight hours, and it is quite possible the error we committed in applying the plaster to the legs for the purpose of extension may have been instrumental in their production. The same may be said of the patches devoid of hair. They corresponded in position and extent to the redness produced by the pressure of the bandage. When seen a few days ago, the patient had regained his strength to such a degree that he could walk with comfort, without support of any kind. The bladder condition remained the same, so did the anæsthetic spot on the sole of the left foot. There is some thickening in the upper lumbar region, and the spines of the first and second lumbar vertebræ are closer together than they should be normally.

CASE 2. *Dislocation with Fracture of the Fifth and Sixth Cervical Vertebræ; Reduction; Death; Necropsy; Remarks.*—Thomas W——, aged twenty-seven, was admitted on June 7th, 1884. The patient was wrestling when he fell, striking his back against a large stone, while the head was jerked violently backwards. At the same instant he experienced great pain in the back, and discovered his inability to move any of his limbs. When first seen he was exceedingly pale and cold; pulse very slow (31 per minute) and compressible; pupils equal and rather dilated; breathing entirely diaphragmatic and very laboured; the limbs were quite flaccid and remained in any position they were placed; no response to stimuli applied to either arms or legs. On examining the cervical part of the spine, a very marked depression involving the fifth and sixth vertebræ, with swelling of the soft parts in the vicinity, was found. He was at once placed on a water-bed, with hot bottles near the feet to hasten reaction. By the next morning the patient had rallied, and he now could give a rational and connected account of the accident. His face was flushed. Temperature 100°, pulse full and rather bounding. No changes in the state of the breathing, nor in the condition of the limbs. He complained very much of the pain in the lower and back part of the neck, which was increased by any movement and pressure. Sensation quite normal in the head and neck; entirely absent in the lower limbs and in the trunk as high as the third intercostal space on each side. There is also anæsthesia of the upper extremities as high as the middle of the deltoid; above the anæsthesia there is an ill-defined zone of hyperæsthesia. There is complete loss of motion in all four extremities. Retention of urine.

Mr. Wright saw the case with Mr. Jones, and it was decided that an attempt at reduction would be justifiable.

The patient having been gently rolled over to his left side Mr. Jones grasped the occiput with the right hand while the left pressed against the chin. He then slowly and deliberately flexed the neck, and while doing so the deformity disappeared with a decided crepitant sensation. The head was then placed on a pillow, with a sand-bag on each side to steady it. As the result of the reduction, it was observed that the right arm had regained the power of motion; no change in the sensation was produced. These manipulations were carried out about 11 A.M. Late in the afternoon the breathing became more embarrassed, and was accompanied by very evident distress. He complained of great thirst, and the temperature inclined slightly upwards. The dyspnœa increased, the lips and face became livid, unconsciousness followed, and the patient died in the evening.

Post-mortem examination.—There were the usual signs of death from asphyxia. Some extravasation of blood among the muscles of the back. On opening the spinal canal there was found some extravasated blood around the cord in the cervical region and some in the lower dorsal. The cord opposite the lower cervical vertebræ was much bruised, and blood had been freely extravasated into its substance. There was fracture through the body of the fifth cervical vertebra, with free destruction of the capsular ligament between the fourth and fifth. No displacement.

Remarks by MR. JONES.—The injury to the cervical spine was no doubt produced by over-extension of the neck, which caused a forward displacement of some of the vertebra, in all probability the fifth and sixth. From the first the case appeared to be a very hopeless one; still, having seen the good effect of extension in another example of spinal dislocation, we were sanguine enough to believe that some benefit would result from the proceeding adopted. Had the injury to the cord been less extensive and its destruction less complete, the replacement of the bones might have been attended by a very different termination. It is always a very anxious question to decide in cases of spinal injury whether the surgeon is justified in carrying out any active treatment. Judging from what we saw in these cases, it would appear that when the injury has been produced by over-extension or a too free flexion of the spine, then interference is right and proper and may be attended by the best possible result. It might be suggested that in the attempt to reduce a displaced vertebra, we may very easily inflict additional injury on the cord. To avoid this we must always take care that the treatment is conducted with great discretion and gentleness, for rough handling can only end in disaster.

ROYAL UNITED HOSPITAL, BATH.

A NEEDLE IN THE BLADDER SIMULATING STONE; REMOVAL BY LITHOTOMY; RECOVERY.

(Under the care of Mr. HENRY W. FREEMAN, F.R.C.S.I.)

A LITTLE boy, under four years of age, was brought to the out-patient department of the hospital by his mother on Nov. 26th, 1884, suffering from bladder irritation, with symptoms of stone. The history elicited by Mr. Roberts, the house-surgeon, ran as follows: Difficult micturition, with screaming; pain commenced in August, 1883, accompanied with blood, sometimes more, sometimes less; and this condition of things continued for a year, when the bleeding ceased, and micturition, although painful, became bearable. The child had been sounded frequently for stone during this period, but nothing had been discovered, and as the symptoms were thought by the medical man in attendance to be due to phimosis, the boy was circumcised twice, but no relief in any way resulted.

On admission into the hospital Mr. Freeman, in conjunction with his colleague, Mr. Ransford, explored the bladder, under chloroform, and on passing a sound into the bladder a grating noise was heard when the instrument was held horizontally and in contact with the posterior portion of the fundus of the bladder, as if a phosphatic calculus were embedded in its coats; but when held vertically, and the curved portion rested on the most inferior portion of the organ, a distinct chink was heard, as if a smooth stone were struck. This, however, was very limited in extent, and it was noticed that the point of the sound could not be got round the foreign body to determine its size or shape. It was fixed. Digital examination of the rectum revealed nothing. The general consensus of opinion was, that a phosphatic calculus had become embedded in the walls of the bladder, and accordingly lateral lithotomy was performed by Mr Freeman on Dec. 6th. On opening the bladder, a sharp body was felt sticking in the anterior portion of the prostate, lying obliquely over the trigone, and resting against the posterior surface of the fundus, and encrusted with calcareous matter. A long pair of flat,-pointed dressing forceps were introduced, and, after a little manœuvring, a small-sized "darning needle," measuring 1⅛ in. in length, and covered for more than an inch with phosphatic deposit, was extracted. The deposit was ⅛ in. in thickness, and included the sharp point, which was as thickly covered as the rest of the shaft; but the eye—blunt end—of the needle, for three-eighths of an inch, was smooth and free of deposit. There was no hæmorrhage. The child passed his urine by the urethra on the thirteenth day after operating, and, at the end of a fortnight, the urine, becoming excessively ammoniacal—due, as pointed out by Dr. Ray Lankester, to the presence of bacteria—and with a temperature of 102°, he was put on quinine, which speedily settled the thing in forty-eight hours; and, besides stating that the external wound was healed at the end of the third week, and that he contracted measles at the end of the fourth week, there is little to record, as he left the hospital well before the sixth week had expired.

Remarks by MR. FREEMAN.—Cases have been recorded where lithotomy has been done in boys where portions of slate pencil have found their way into the bladder by the urethra, but a needle in the bladder of a child, by whatever route it may have got there, followed by lithotomy for its removal, is of rare occurrence. The position of the needle in this small bladder seemed to me as if that portion sticking in the prostate dammed up in a measure the internal meatus, and the little constant whirlpools of urine around this portion of about half an inch explains why it was bright and gave the metallic ring when struck with the sound. We knew nothing of the needle history until after the operation had taken place, but the mother was positive that a "darning needle" such as we extracted had been swallowed by this child before her own eyes on Whit Sunday, May 13th, 1883. The needle, according to the mother's statement, was in the child's body about eighteen months, and the question arises how it found its way into the bladder. My first impression was that the needle had been thrust along the urethra by some precocious nurse girl, but the mother asserts that the child had never been out of her hands. Then came the history of its being swallowed, and if this was the identical needle, how did it get into such a receptacle as the bladder? Did it pass into the bladder by the rectum or by the small intestine; or, bearing in mind the anatomical relations of the ascending and descending colon to the kidneys, did it pass through the bowel into the pelvis of the kidney and thence by ureter into the bladder?

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

New Growths in Intestines.—Spondylolisthesis and other results of Pressure on the Spinal Column.—Lung Disease in Wild Animals.—Sudden Death from Impaction of Trachea by a Bronchial Gland.—Malignant Growth in the Forearm of an Infant.—Renal Cancer associated with Calculi.

AN ordinary meeting of this Society was held on Tuesday last, Dr. J. S. Bristowe, F.R.S., President, in the chair. Mr. Bland Sutton's communication on Comparative Pathology was warmly applauded.

Dr. NORMAN MOORE read a paper on Cases of New Growth in the Alimentary Canal. The first case was one of carcinoma of the cæcum spreading to the duodenum by direct contact in a woman aged forty-four, who was under Dr. Moore's care in St. Bartholomew's Hospital. There was ulceration over an extent of four inches in the cæcum, and the ileo-cæcal valve was invaded. A deep opening led from the inner part of the colon to the sixth inch of the duodenum by way of firm adhesions; this part of the duodenum was also infiltrated. The vermiform appendix was adherent to the cæcum, and also infiltrated. The subjacent organs were not affected. Only one small gland near the front of the cæcum was diseased. The patient had been ill since January, 1883,

and wasting from October till April, 1884. Pain in the right side, vomiting, diarrhœa, anæmia, and a slightly movable tumour lying between the ribs and iliac crest were the symptoms and signs noted. In two months the tumour became a little larger and rather less movable. The only constant symptom was general diarrhœa. There was no melæna. She died suddenly in August, and an adherent clot was found in each pulmonary artery. The second case was one of carcinoma of the descending colon spreading in direct continuity to the stomach of a woman aged forty-six, who was under the care of Dr. Goe. The new growth affected the middle part of the descending colon, and it was ulcerated at its base. The stomach was affected for about three inches, and there was a very large ulcerated hole in the stomach leading directly into the descending colon. The cancer was adherent to the parietes, and the fascia had begun to be penetrated. There were no secondary deposits. There had been pain in the left lumbar region since August, 1884, and the swelling appeared soon after, and continued to increase till death in Feb. 1885. Anæmia, slight melæna, and diarrhœa, and occasional sickness were the signs noted. Both these cases were remarkable as carcinoma spreading by direct continuity only, and both illustrated the difficulty of exact diagnosis in such cases. The age of the patient and the characters of the tumour were similar in each case, as were also the slight rise in temperature and the intense anæmia. Spread by direct continuity was only present in six instances out of twenty-four post-mortem examinations of cancer of the intestines made from cases in the medical wards of St. Bartholomew's Hospital during the past three years. In one case the new growth had opened from the stomach to the transverse colon. The third specimen was one of sarcoma of the descending colon taken from a man aged twenty-five; the symptoms were those of obstruction. There was a ragged new growth which included the whole intestinal wall of the upper part of the descending colon. It was a round-celled sarcoma of loose structure, and seemed to have grown in from the peritoneum. There were no secondary deposits. The illness lasted but a few weeks. The fourth specimen was one of sarcoma of the descending colon and ileum, spreading by direct continuity, taken from a man aged forty years. The new growth began about the middle of the colon, and there protruded as a pink and white mass without ulceration. The peritoneum and rectus abdominis were penetrated and a sinus opened externally. The ileum was adherent to, and penetrated by, the new growth. No glands and no remote organs were affected. The patient was under observation for one year. The sinus was due to surgical treatment. Acute peritonitis closed the scene. These two cases of sarcoma of the intestine resembled one another in the fact that both terminated in peritonitis, due to the rupture of the loosely-formed growth. In their continuous infiltration their natural history was similar to that of the two cases of carcinoma. These were the only two cases of sarcoma out of twenty-six cases of new growth of the intestines recently examined by Dr. Moore. These specimens show that a new growth may spread by continuity only, irrespective of its pathological nature. They illustrated the difficulty of determining in what direction and over what area any new growth may spread.—Dr. BRISTOWE asked what Dr. Moore meant by spreading in direct continuity. (To this the reply was a spread of the growth in a *right* line.) Dr. Bristowe then said that sarcomatous tumours were particularly rare. He had seen many cases more or less resembling those described by Dr. Moore. A male and a female case of malignant disease of the cæcum were referred to. There were no secondary growths; the spread was by continuity. After some pain a movable tumour appeared, which, in the case of the woman, might have been mistaken for a kidney. There was no disturbance of the bowels. Emaciation was progressive. The tumour was punctured, but nothing more than gas and fæcal matter escaped, and a superficial abscess formed. The case of the man was almost similar. A puncture was also made here, with the result of the formation of a superficial abscess. In other cases the colon and the stomach communicated directly as the result of the ulcerative disease.

Mr. ARBUTHNOT LANE described some of the changes produced by Pressure in the Spinal Column. He referred to a paper on spinal deformity produced in labourers by carrying heavy loads (Medico-Chirurgical Transactions, 1884), and showed that in most of these cases the weight was supported in great part by the much enlarged and thickened lumbar spinous processes, which articulated with one another by broad surfaces, surrounded by a capsule. The weight was supported also by the articular processes, which increased in size, and articulated by flattened extremities, with deep depressions in the opposing laminæ, especially in the case of the sacrum and last lumbar vertebra. As there was little tendency to forward displacement, the articular surfaces were simply flattened, and retained their inward and outward direction. In many cases osteophytic growth took place from the adjoining posterior margins of the sacrum and lumbar vertebræ. This might touch the enlarged sacral articular process, and sometimes almost obliterate the intervertebral foramen, probably causing irritation or destruction of the fifth lumbar nerve. In other cases, especially in those that are produced by carrying weights on the back, there was a marked tendency to forward displacement of the lower lumbar vertebræ, the fifth more particularly. In early cases this produced an alteration in the direction of the articular processes from a lateral direction to one looking forwards and backwards. The reason of this was obvious. The articulation between the body of the fifth lumbar vertebra and sacrum was rendered loose, so that by pressure forwards displacement could be produced. In more advanced cases, besides increased changes in the articular processes, permanent forward displacement of the fifth lumbar vertebra or spondylolisthesis ensued. In some cases there was an articular cavity between the two bones, while in others their opposing surfaces were irregular and were connected by dense ligamentous tissue. In these, by the approximation of the laminæ of the fifth lumbar and the posterior margin of the sacral facet, the intervertebral foramina were encroached on or obliterated, and the fifth nerve more or less destroyed. He showed two well-marked cases of spondylolisthesis produced in this way. One, in which there was no synovial space in the lowest fibro-cartilage, presented synostosis of both sacro-iliac articulations, distinctly caused by pressure. He had shown a similar specimen last year. He referred to two other instances of spondylolisthesis, which he had described in the last volume of the Transactions. In the dissecting-room this condition was not infrequently met with in the early stage. Dr. Neugebauer collected descriptions of seventeen specimens from various Continental museums, one of which, "Bassin de Praqua," closely resembled three of those that he (Mr. Lane) had described. This condition was certainly not so rare as Dr. Neugebauer supposed.—Mr. SHATTOCK said that Mr. Lane's arguments proved that there were other causes than that given by Neugebauer for spondylolisthesis. Neugebauer visited all the museums, and found only one specimen, which had come from a patient under the care of Dr. Hewitt. Neugebauer believed that there was a congenital defect of union between the arch of the fifth lumbar vertebra and its body. Mr. Lane's specimens showed that there was a want of continuity between the lamina of the fifth lumbar vertebra and its body; spondylolisthesis might be due to bending of the bones which were softened from senile atrophy.

Mr. J. BLAND SUTTON made an elaborate communication on Pulmonary Diseases in Wild Animals, in which he gave a general account of the zoological distribution of certain forms of lung disease among wild animals dying in the Zoological Society's Gardens during the past three or four years. The opinion held by the medical profession and the world at large that wild animals in captivity die from pulmonary tuberculosis lacked foundation, and was certainly erroneous. The conclusions drawn were founded on the following series of cases. From October, 1881, to December 31st, 1884, the total number of deaths was 2779, made up of 583 mammals, 1408 birds, and 788 reptiles. Of the 583 mammals there were 303 quadrumana, including 7 anthropomorphous apes. Of these mammals five died from pulmonary tuberculosis—namely, a tree-porcupine, cyre, kinkajou, lagotis, and an agouti; only one case of general tuberculosis was seen, and that was in a coatimondi. It was remarkable that all these tuberculous animals came from South America and the tropical portions of North America, a region named by zoologists the "neo-tropical region." It differs from all the great zoological divisions of the earth's surface by the almost unequalled extent and luxuriance of its forests, its delightful climate, and the richness and variety of its animal life. It was also the home of the guinea-pig. Pneumonic phthisis had been seen in twelve cases, of which five

ON THE

TREATMENT OF URETHRAL STRICTURE.[1]

BY F. SWINFORD EDWARDS, F.R.C.S. ENG.,
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SINCE the time of John Hunter and Sir Everard Home the rational treatment of stricture of the urethra has steadily but surely advanced. This I think will be readily allowed after perusing a work on "Strictures in the Urethra" by the latter surgeon, published in the beginning of this century. Then in cases where the passage of a bougie was an impossibility, it was the practice to cauterise the stricture with nitrate of silver by means of a bougie armée. One case is recorded where this procedure was repeated 1258 times in the space of fifteen years, ending singularly in a fortunate result—i.e., the passage of a bougie into the bladder. But this treatment was an advance upon the method which preceded it, and which consisted in pressing a bougie against a stricture, the object being to cause ulceration followed by perforation.

[The views of Otis on the calibre of the normal urethra were here reviewed, the author stating that he entirely coincided with the conclusions of this surgeon. Attention was drawn to cases of chronic urethral discharge depending upon a small or contracted meatus in which all the symptoms had cleared up after freely incising the orifice. The fact of a penile fistula being due to a stricture which readily admitted a No. 22 French bougie, and which consequently had not been diagnosed, was instanced as showing how important was the recognition of anterior strictures of large calibre. In classifying strictures, Dittel's was mentioned as being one of the best, though for practical purposes the following was recommended. Setting aside contractions due to spasm, organic strictures were divided into two chief classes: anterior and posterior, or strictures of the penile and of the fixed urethra, these being either of large or of small calibre; passable or impassable, eccentric or concentric. Traumatic, complicated, and congenital were mentioned as subvarieties. The so-called "temper" of strictures was dwelt upon as greatly influencing the subsequent treatment.]

The vast majority of stricture cases which come under notice are submitted, at all events, I suppose, in the first place, to gradual interrupted dilatation, and rightly so, as this is the simplest and safest of all methods. There is no doubt that a cure follows in a certain proportion of these cases, and relief in many more. In private practice most cases are amenable to this treatment; in hospital, however, one meets with more aggravated examples of this disease, so that the percentage of cases in which other means have to be resorted to is larger. Recent strictures, when not at the meatus, are most benefited by this. When the obstruction is due to a wart or bridle—Dittel's first class of stricture—one or two passages of a bougie may suffice for a cure. Some years ago a gentleman came to me with the following symptoms: narrowing and twisting of the stream, increase in frequency of micturition, and gleet. I passed a bougie very gently, but this was followed by two or three drops of blood; after repeating this once or twice, all his symptoms disappeared. I suspect his trouble was due to what old writers called a caruncle; in other words, a wart or outgrowth of granulations, which was broken down and removed by the passage of the bougie.

Respecting the treatment by gradual interrupted dilatation a good deal of one's success will depend upon the kind of bougie used and the way of using it. For this purpose there is no better instrument made than the French bougie olivaire.

In cases of stricture of large calibre in the penile urethra I am now trying Otis's method. With his dilating urethrotome the contracted parts of the canal are dilated and cut until it is restored to its normal dimensions, which have been previously ascertained by means of the urethrometre. Should there be a stricture at the bulbo-membranous junction, it is left for future treatment if necessary. I say advisedly "if necessary," for this subpubic stricture which may be impassable is sometimes due to spasm dependent upon the anterior strictures. Otis and his followers believe that this is usually the case. I am not prepared to go so far as this, but I certainly think that before we subject a patient to the risks—for though small they are real—of a cutting operation in the fixed urethra, we ought to eliminate all chance of this being spasm due to co-existing anterior contractions. I have had two or three cases where this treatment has been attended with the best results, others which are still under treatment are making satisfactory progress, though in one case epididymitis and in two urethral rheumatism has been set up. It must be borne in mind, however, that these cases were treated as out-patients.

So much, then, for strictures in the penile urethra. Concerning those in the deeper portion, which are often of small calibre, with the orifice situated eccentrically—accompanied, perhaps, by a good deal of fibrous thickening—they are frequently impassable to most varieties of instrument. To treat such cases successfully one needs a selection of fine filiform gum elastic bougies, either straight or with the ends spirally twisted. It is to this little instrument I would especially direct attention. Armed with one or two of this form of bougie, one may enter almost any stricture, however eccentric or tortuous it may be. These bougies are made with a screw attached in order to act as pilots or conducting bougies to catheters or some form of urethrotome or divulsor. Having in a given case succeeded in passing a guide, several courses are open to one. It may be left in for a time until the stricture dilates, admitting a larger instrument; this being the method known as continuous dilatation. Personally I do not mind leaving a bougie in the urethra for an hour or two when it is necessary to dilate a stricture for the purpose of passing a urethrotome; but to treat a stricture by tying in a bougie for days does not commend itself to me. I have seen it set up cystitis, which has at once been relieved by performing an internal urethrotomy. It also not unfrequently causes urethritis, abscess, and epididymitis, accompanied by considerable constitutional disturbance. Again, a catheter having a screw attached may be made fast to the "pilot," and pushed on into the bladder, thus giving relief in cases of retention. If the stricture be of long-standing, and at all extensive, the guide bougie being *in situ*, I think it is as well to perform an internal urethrotomy at once, after the manner to be described immediately; but if there is any reason to believe that the stricture is a dilatable one, or for the sake of procuring immediate relief without having recourse to a cutting operation, Harrison's modification of Holt's divulsor might with advantage be employed. By this instrument is accomplished what may be called "rapid dilatation," neither the stricture nor the urethra being ruptured, as is the case with Holt's instrument. I used this dilator quite recently in the case of an old man who came to St. Peter's with incontinence, dribbling by day and night. He could only micturate in drops. There were several strictures, one being subpubic. Through this I could pass nothing, until I took a fine corkscrew guide bougie which fitted Harrison's dilator. There was no doubt that the sooner this old man was able to empty his bladder the better for him, so the pilot being in position I screwed on the dilator and passed the three smallest bolts without causing much pain. On removing the instrument I asked the patient to pass urine. He was delighted to find that it came in a stream; though small, it was a better performance than he had accomplished for many a long day.

[The method of performing internal urethrotomy by means of Teevan's modification of Maisonneuve's urethrotome was here described, and the practice of tying in a catheter after the operation condemned.]

I have performed internal urethrotomy between twenty-five and thirty times, and have assisted in about a hundred more. The results I have obtained have been very good, as all my patients have been able to micturate in a good stream, other symptoms which before had troubled them being completely relieved. I am not content unless I can pass a No. 22 bougie or catheter after the operation through the deep urethra; and this size must be maintained, or sometimes increased. If there are anterior strictures large in calibre, they are, as before said, best dealt with by means of dilating urethrotomy. I find, on looking through the register, that since I have been attached to St. Peter's Hospital—i.e., for the last three years—we have had 142 cases of internal urethrotomy, with three deaths only. Two of these cases died from causes, not likely to occur again; and in the third I do not think that death was due to the operation, at least not directly. I will briefly narrate these cases.

In the first case, that of a man aged thirty-five, who had

[1] Read before the West London Med.-Chir. Society, Jan. 2nd, 1885.

suffered from stricture for fourteen years, and had undergone both supra-pubic puncture and perineal section, there was some difficulty in passing a catheter after the urethrotomy, so an instrument with a larger blade, No. 26 instead of No. 22, was used for the second time. A rigor followed soon after the operation, and the patient died collapsed on the following morning. The second fatal case was one of traumatic stricture from which the man, aged forty-four, had suffered for twenty-six years. In this case also difficulty was experienced in passing the catheter after the section, in fact it is doubtful whether an instrument was passed into the bladder after the urethrotomy. A severe rigor occurred after the operation, followed by suppression of urine. From this he recovered sufficiently to get up daily. This was a fortnight after the operation. Four days afterwards he suddenly died. The post-mortem revealed suppurative nephritis. The third case—the only fatal one out of sixty-five operations during the departed year—died from shock due to hæmorrhage which was severe enough to call for external urethrotomy. How this arose I cannot say. It is the only case in which I have seen bleeding worth mentioning follow the use of this instrument when the blade is of a size to cut to 22 of the French scale.

Let me here mention a fact which has struck me, and which is that in the three cases just recorded some difficulty was met with in the after introduction of a catheter; I have also noticed that this has been the case nine times out of ten where suppression has followed. I would suggest that where the catheter does not pass easily, it is better to desist or even reinsert the urethrotome than use any force or prolonged manipulation. Immediately before or after the operation it is a useful practice to give two grains of quinine in a little hot brandy-and-water, in order to prevent shock and rigors. Harrison of Liverpool recommends three minims of aconite for this purpose, but although I have given it an extensive trial, I have not found it of much use. Anæsthetics are not as a rule required, though, if the stricture is likely to be difficult to cut through, ether should be given.

Cocaine bids fair to be of great use in urethral surgery; at present its high price precludes its being generally employed in hospitals.

After the operation it is important that the patient should be kept warm between blankets, with hot bottles to his feet; the sooner a free diaphoresis is established the better. The chief thing to guard against is urethral fever, ushered in by rigors, and accompanied sometimes by suppression. There is generally a rise of temperature after this operation, but if the kidneys are acting no alarm need be felt. I have known the temperature to run up to 104° more than once, and yet be normal after the lapse of twenty-four hours. If, however, suppression occurs, prompt remedies are necessary, together with careful and assiduous nursing. There is a patient of mine in the West London Hospital at the present time who is recovering from this complication, thanks to Mr. Menzies, the house-surgeon, and to the careful nursing he has had. The best means at present known for combating this condition is the hot-air or vapour-bath, with large doses of digitalis. Dry cupping to the loins and turpentine enemata have also proved most useful. The patient's strength must be supported, for which the half-hourly administration of brandy, &c., may be necessary. The diarrhœa and vomiting which are sometimes present should not be stopped unless excessive; the alimentary canal is simply doing vicariously the work of the kidneys.

The instrument the use of which has just been described cuts from before backwards, as do also those of Voillemier, Hill, Maisonneuve, Gouley, and Harrison. As I prefer Teevan's, I will not take up time by describing the others. Of the instruments which cut in the opposite direction the best are Watson's and Civiale's, the latter, or Sir Henry Thompson's modification, being the better known of the two. In his recent lectures at the Royal College of Surgeons Sir Henry extolled its use. It has, however, certain drawbacks, some or all of which have been recognised by the following authorities—Coulson, Gouley, Berkeley Hill, Teevan, and Harrison.

Touching the splitting of strictures by Holt's method, my experience has been limited to cases which have relapsed after this treatment, and of which I have met with not a few. Of these I may say that the strictures are of a more severe form than those which have not been submitted to operation. Between the years 1870 and 1880, 115 cases were split in the Westminster Hospital, with three deaths, according to Mr. Davy. Comparing these statistics with those I have given, internal urethrotomy as performed at St. Peter's undoubtedly carries off the palm, although Holt's method bears favourable comparison with internal urethrotomy as performed at University College Hospital; for Erichsen in his new edition mentions that in seventy-six cases during five years there were four deaths, eight cases of perineal abscess, besides extravasation in one and epididymitis in four cases.

As to external urethrotomy, I will here only say that as this is a more serious operation than that of internal, it ought to be limited—except possibly in some cases of traumatic stricture, accompanied or not by urinary fistulæ—to cases of impassable stricture, which ought nowadays to be but few and far between, looking to the great improvement which has of late years taken place in bougies and other urethral instruments.

In conclusion, I would direct attention to the importance of being able to recognise the presence of slight strictures—i.e., strictures of large calibre situated in the penile urethra,—such a condition being quite sufficient to keep up a gleet, to cause irritability of the bladder and other urinary troubles, not forgetting spasmodic stricture in the deep urethra. If this anterior stricture of large calibre admits of treatment by bougie—i.e., if we are able to restore the urethra to its normal size by this means,—well and good. But if not, no harm, but immense benefit, will be derived from dilating urethrotomy in careful hands. For organic strictures in the deep urethra, where dilatation either cannot be resorted to or does not succeed, I would recommend internal urethrotomy with Teevan's urethrotome.

A CASE OF CHOREA OF FIFTEEN YEARS' STANDING IN A MAN AGED FIFTY-SIX.

By J. C. M'LEARN, M.D.,
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SOME attention having been lately given to the subject of chorea in the aged, I hope that the following case may be of interest.

T. M——, aged fifty-six, a gardener, was admitted into this infirmary on June 3rd, 1884, suffering from chronic chorea. His parents, brothers, and sisters were all healthy, and there appears to have been no rheumatism or nervous disease in the family. He is a widower with two sons, aged respectively fourteen and twenty-two years. The elder is healthy, but the younger is said by the friends to be fidgety and to have involuntary movements of the feet and shoulders, especially noticeable whilst sitting reading. He has not had rheumatism, has the heart sounds normal, and is to all appearance in good health. The patient, although born in Scotland, has resided about London for the greater part of his life, and has never been abroad. He had always enjoyed good health, has been a very temperate man and a non-smoker. He has not suffered from acute rheumatism, fits, or gout, but had been troubled with muscular rheumatism, which took the form of lumbago. About fifteen years ago he became "nervous," walked staggeringly, had startings of the hands, and, when sitting, shuffling of the feet, but in a slight degree. These symptoms, the onset of which was very gradual, and for which no cause has been assigned, continued with but slight increase until about four years ago, when his wife died somewhat suddenly after three days' illness. This event caused him to appear dazed for a time, and greatly aggravated the symptoms—so much so that he has never been able to work since, and has from that date continued to get worse. The patient is a man of medium height, fairly nourished, with greyish beard and bald on the top of his head. On looking at him as he lies in bed, he presents the appearance of constant irregular movements which are typically choreic. These movements affect the arms and head more than the trunk and legs. The head is turned from side to side, and frequently lifted from the pillow as though he were trying to look at his feet. The facial muscles, especially those around the mouth and the occipito-frontalis, are frequently in action. The arms, particularly the right, are constantly in motion, being pushed down and retracted, the wrist and elbow being lifted from

the bed, and the pronators and supinators brought into action. The fingers are extended and flexed in turn, the thumbs also performing these movements in the same jerky manner. The shoulders partake in most irregular motions, and are, with the upper part of the trunk, frequently lifted off the bed. The legs and feet are also affected, but in a less degree. All these movements, which in character are irregular, jerky, fidgety, and often seem half purposelike, may occur in a few seconds, many of them being synchronous, and they are almost incessantly repeated while under observation. They stop only during sleep, but are lessened in frequency and severity when no one is near, and are increased again when any one notices him or speaks to him. He generally lies during the day with a handkerchief over his face, so that he may not be disturbed nor have the movements increased by seeing the other patients walk about. On asking him a question he tries hard to reply, but some little time usually elapses before he can articulate, and then not at all distinctly, though sometimes he will pronounce several words well and rapidly. His tongue is not protruded involuntarily, and when put out is not withdrawn with a jerk. He answers questions rationally, but his memory is not good. He is also rather irritable, and gets greatly excited at trifling things, but he has no dementia. He is somewhat deaf, but his eyesight is good, and he reads a great deal. Ophthalmoscopic examination showed the discs to be normal, but the veins were swollen. He perspires frequently and profusely, and complains of being made warm by the movements, so that he only wears one blanket whilst his fellow patients use three. His temperature has been often taken, but has only reached as a maximum 99·6°. The tongue is clean, and he eats his diet, an ordinary meat one, fairly, feeding himself, but should anyone speak to him whilst doing so a mishap is almost sure to occur. His bowels are regular, and he has not been sick or had vomiting since his admission. He has perfect control over both bladder and rectum. The pulse is about 80, and there is no cardiac murmur, the heart sounds being normal. The respiration ranges from 14 to 18 per minute, and is broken and irregular. He cannot stand alone, and when trying to walk with assistance his gait is shuffling, jerky, and halting, the heel usually touching the floor first. He has diminished plantar reflex on tickling the soles. Ankle clonus is absent, but the patellar reflexes are exaggerated. He often complains of headache, and of slight pains in the calves of the legs, and suffers from a feeling of weariness from the muscular movements, which otherwise are painless. The cutaneous sensibility is not impaired. His urine averages about twenty-two ounces per diem, and has a specific gravity of 1034. It is turbid, which microscopical examination shows to be due to urates. It is acid in reaction, has no albumen, only a trace of sugar, and no indican. The urea is diminished in quantity, being only 242 grains per diem. The movements have not improved under treatment. He has had arsenic and iron for some months, followed by bromide of potassium and tincture of conium, and lately sulphate of zinc was ordered in three-grain doses. The ether spray has also been applied over the spine.

Remarks.—The case seems to carry out the view of Charcot that this form of chorea is incurable, but is at variance with his opinion that it is always associated with dementia. The following points may be noticed:—1. The movements have existed for fifteen years. 2. The movements were much increased by an emotional cause—i.e., the shock caused by his wife's death. 3. The absence of heart disease and of rheumatism, except the muscular variety. 4. The diminution of urea, though the profuse sweats might partly account for the small quantity present in the urine. 5. The probability that the son may at some future time be attacked by chorea in a marked form.

Holborn Union Infirmary.

CITY OF LONDON TRUSS SOCIETY.—The annual general meeting of the governors of this Society was held on the 4th inst., when it was stated that the number of patients relieved in 1884 was 9248, the highest ever recorded by the Society, and 122 more than the number relieved in 1883, bringing up the total of patients relieved at the close of last year to 405,426. The number of instruments supplied was 9305. The income amounted to £5810, exclusive of the balance brought forward from 1883, as against £8990 in the previous year.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas at morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MANCHESTER ROYAL INFIRMARY.

TWO CASES OF SPINAL INJURY.

(Under the care of Mr. THOMAS JONES.)

THE two cases of spinal injury which Mr. Thomas Jones records will be found very interesting. The first case, one of dislocation in the lumbar region with paralysis of the lower extremities, was apparently unaccompanied by fracture, no evidence of it being obtained from manipulation of the part under anæsthetics, either before or after reduction; nor was there the line of hyperæsthesia commonly found in fracture at the junction of the paralysed and unparalysed parts, and which was noted in the second case of injury to the cervical region, where from the form of the vertebræ, dislocation, though rare, is more often uncomplicated by fracture than in any other region of the spine.

CASE 1. *Dislocation of the Spine in the Upper Lumbar Region; Complete Paraplegia; Extension of the Spine under Chloroform; Recovery; Remarks.*—William B——, aged twenty-three, was admitted on May 8th, 1884. While unloading timber, some heavy pieces came violently in contact with the posterior and lower part of the neck. At first he was driven into a sitting posture, and then the back was bent to such an extent that the forehead touched the knees. When extricated from this position, a deformity of the back existed, and the patient was not able to move his legs. He was taken to the infirmary without delay, and within an hour of his admission Mr. Jones saw him with Mr. Pollard, then the resident surgical officer. On examining the back, a large, soft, fluctuating swelling was found occupying the lumbar region. Through this swelling the spines of the vertebræ could be detected on deep pressure. By tracing them from below upwards an abrupt depression between the first and second lumbar vertebræ was found, and at the bottom of the depression the spines of the vertebræ above could be felt. The continuity of the column was therefore interrupted in the upper part of the lumbar region by separation of the first from the second lumbar vertebra. It was also noted that the patient bore unmistakable evidence of severe shock, and that there was complete motor and sensory paralysis in both lower extremities. The upper limit of the paralysis was not well defined. From the symptoms it was concluded that a partial dislocation had been produced by extreme flexion of the spine, and it appeared very desirable, if possible, to reduce the deformity and restore the suspended functions of the cord. With this object the patient was placed under the influence of chloroform and gentle extension of the spine made. This was done by means of two long towels fixed to the thighs immediately above each knee, while an assistant steadied the chest and upper part of the spine. During the progress of the extension the patient was lying upon his left side, so that any change in the position of the vertebra could be more readily witnessed. After a few seconds' extension a sudden jerk was experienced, and the vertebra regained its position with an audible click. When the action of the anæsthetic had passed off, it was found that motion and sensation in both legs had been restored to a considerable degree. The restoration was more complete in the right limb. The patient complained of much pain in the region of the injury, which was decidedly relieved by a quarter of a grain of morphia hypodermically administered.

May 9th.—The patient is able to move both legs; sensation very good. There are, however, patches of numbness, which are more extensive on the left than the right side. Retention of urine; catheter consequently employed, and urine drawn off three or four times in the twenty-four hours.

11th.—Area of impaired sensation on the left side reaches as high as the middle of the thigh. The urine is alkaline and

ammoniacal; bladder washed out daily with a weak solution of boracic acid. Several bullæ have made their appearance on the dorsum of the left foot. These may possibly be attributed to the application of strapping and bandage, with the view of applying a weight to steady the limb, or they may be indicative of trophic changes.

14th.—No more bullæ have appeared. Numbness, less marked, is now confined to the left thigh. Has much greater power in the limbs, and is now able to lift the left leg off the bed. Has considerable pain when the bladder is distended. Troublesome constipation, with pain in the rectum.

June 15th.—Gradual improvement since the last report. A Sayre's plaster jacket applied. While this was being done patient felt faint, and in the evening the temperature rose nearly two degrees. Urine, now faintly acid, contains a small amount of albumen.

20th.—Faradaic current to the legs, muscles react readily. Patient got up for the first time, but could not stand without assistance.

22nd.—Complains of headache and pain in the back. He looks ill. The temperature reached 102° in the morning, and 103° in the evening.

26th.—Faradaism continued. The muscles supplied by the anterior crural nerve on the right side, and by the sciatic on the left, do not react so readily as the others.

July 1st.—The febrile attack, which has lasted for nearly ten days, has subsided; the patient expresses himself as feeling much better, and as being free from pain.

12th.—Each time the limbs are galvanised pain of a severe character is experienced, especially in the legs.

15th.—Has had another relapse, the temperature again reaching 103° on two occasions. The galvanism is suspected of being the cause of this attack. Plaster jacket removed; spines of second and third lumbar vertebræ prominent.

23rd.—The patient has passed a good night. The temperature normal. For the first time he is able to pass a small quantity of urine, but this can only be accomplished by the employment of considerable force. Daily washing of the bladder is continued.

Aug. 2nd.—Still another relapse, and this time no likely cause can be discovered. This attack lasted five days, and during its progress the highest temperature, 103·4°, was recorded. He complained of intense headache and some sickness; the face was flushed and the pulse very rapid (120); there was also pain in the lumbar spine, extending into the dorsal region; great hyperæsthesia over the same parts, and very severe pain in the lower limbs, especially in the knees. His urine contained phosphates and a considerable quantity of pus.

8th.—The temperature again normal. The pain has ceased, except in the sole of the left foot, where he has very intense shooting pains and great hyperæsthesia.

16th.—Renewal of the pain in the back; temperature last evening 102°; is normal again this morning. The electric reactions of the muscles of the legs were as follows:—The right thigh (anterior half)—weak current: Vastus internus, rectus, and sartorius contract less strongly than vastus externus. Left thigh (anterior half)—weak current: Rectus and vastus externus contract powerfully; sartorius contracts readily; vastus internus also contracts readily, but not so well as the vastus externus. Right thigh (posterior half)—weak current: Semi-tendinosus and adductors contract very feebly; semi-membranosus and biceps contract moderately. Left thigh (posterior half)—weak current: Semi-tendinosus and adductors contract fairly well; semi-membranosus and biceps only weakly. Right leg (anterior half)—weak current: Extensors and peronei contract readily. Left leg (anterior half)—weak current: Tibialis anticus contracts only slightly; peronei and extensors less than right leg. Right leg (posterior half)—weak current: Flexors contract moderately well. Left leg (posterior half)—weak current: Flexors contract feebly. There is slight anæsthesia behind the left external malleolus and in the sole of the left foot. Tactile sensation delayed in the outer side of the middle and lower thirds of the left thigh. Pressure on the sole of this foot causes pain. There is hyperæsthesia of the three outer toes of the left foot. Along the front and inner surface of both tibiæ near the anterior edge there are hairless patches. These are about an inch and a half in length by a quarter of an inch wide. Previous to the disappearance of the hair some redness had appeared.

24th.—Temperature last night rose to 102·2°, while the pain and tenderness in the back returned. There was also pain of a shooting character in the left leg and foot. There has never been any girdle pain. Temperature this morning 98·6°.

Sept. 8th.—Has been quite free from pain the last few days. With a little assistance he is now able to stand, and to walk a few yards. Has had a paroplastic felt jacket made to fit the back. This gives him great support. Hyperæsthetic spot in left foot still present. Complains of a feeling of constriction in the left leg on flexing the foot.

16th.—A relapse last night. Temperature 103°. Had distinct rigors. Return of the shooting pains in the back and left leg. This, which was the last febrile attack, lasted two days. From this time the patient began to make a more decided improvement, which has steadily and uninterruptedly continued up to the present time. On Oct. 15th he left the infirmary, after a stay of five months, and went to the convalescent hospital at Cheadle. Since his discharge he has made periodical visits to the infirmary.

Remarks by Mr. JONES.—In this case the spinal displacement was produced by extreme flexion of the spine, the result of a heavy weight falling upon the upper part of the column. The effect of this would be to rupture the ligaments between the spinous processes and the neural arches, and so allow incomplete separation of one vertebra from another. The ease with which replacement took place was certainly remarkable, and the sound which accompanied it was so distinct as to be audible to all the bystanders. The alkalinity of the urine became apparent on the third day, and it was thirty-five days before it regained its acidity. The expelling power of the bladder is still wanting; even now, eight months after the accident, he is compelled to employ a catheter. It is difficult to offer a reasonable explanation of the recurrent febrile attacks; they may possibly have been occasioned by a slight transient inflammation of the spinal meninges at the seat of injury. The trophic changes observed were not numerous. The bullæ began to appear at the end of forty-eight hours, and it is quite possible the error we committed in applying the plaster to the legs for the purpose of extension may have been instrumental in their production. The same may be said of the patches devoid of hair. They corresponded in position and extent to the redness produced by the pressure of the bandage. When seen a few days ago, the patient had regained his strength to such a degree that he could walk with comfort, without support of any kind. The bladder condition remained the same, so did the anæsthetic spot on the sole of the left foot. There is some thickening in the upper lumbar region, and the spines of the first and second lumbar vertebræ are closer together than they should be normally.

CASE 2. *Dislocation with Fracture of the Fifth and Sixth Cervical Vertebræ; Reduction; Death; Necropsy; Remarks.*—Thomas W——, aged twenty-seven, was admitted on June 7th, 1884. The patient was wrestling when he fell, striking his back against a large stone, while the head was jerked violently backwards. At the same instant he experienced great pain in the back, and discovered his inability to move any of his limbs. When first seen he was exceedingly pale and cold; pulse very slow (31 per minute) and compressible; pupils equal and rather dilated; breathing entirely diaphragmatic and very laboured; the limbs were quite flaccid and remained in any position they were placed; no response to stimuli applied to either arms or legs. On examining the cervical part of the spine, a very marked depression involving the fifth and sixth vertebræ, with swelling of the soft parts in the vicinity, was found. He was at once placed on a water-bed, with hot bottles near the feet to hasten reaction. By the next morning the patient had rallied, and he now could give a rational and connected account of the accident. His face was flushed. Temperature 100°, pulse full and rather bounding. No changes in the state of the breathing, nor in the condition of the limbs. He complained very much of the pain in the lower and back part of the neck, which was increased by any movement and pressure. Sensation quite normal in the head and neck; entirely absent in the lower limbs and in the trunk as high as the third intercostal space on each side. There is also anæsthesia of the upper extremities as high as the middle of the deltoid; above the anæsthesia there is an ill-defined zone of hyperæsthesia. There is complete loss of motion in all four extremities. Retention of urine.

Mr. Wright saw the case with Mr. Jones, and it was decided that an attempt at reduction would be justifiable.

The patient having been gently rolled over to his left side Mr. Jones grasped the occiput with the right hand while the left pressed against the chin. He then slowly and deliberately flexed the neck, and while doing so the deformity disappeared with a decided crepitant sensation. The head was then placed on a pillow, with a sand-bag on each side to steady it. As the result of the reduction, it was observed that the right arm had regained the power of motion; no change in the sensation was produced. These manipulations were carried out about 11 A.M. Late in the afternoon the breathing became more embarrassed, and was accompanied by very evident distress. He complained of great thirst, and the temperature inclined slightly upwards. The dyspnœa increased, the lips and face became livid, unconsciousness followed, and the patient died in the evening.

Post-mortem examination.—There were the usual signs of death from asphyxia. Some extravasation of blood among the muscles of the back. On opening the spinal canal there was found some extravasated blood around the cord in the cervical region and some in the lower dorsal. The cord opposite the lower cervical vertebræ was much bruised, and blood had been freely extravasated into its substance. There was fracture through the body of the fifth cervical vertebra, with free destruction of the capsular ligament between the fourth and fifth. No displacement.

Remarks by Mr. JONES.—The injury to the cervical spine was no doubt produced by over-extension of the neck, which caused a forward displacement of some of the vertebræ, in all probability the fifth and sixth. From the first the case appeared to be a very hopeless one; still, having seen the good effect of extension in another example of spinal dislocation, we were sanguine enough to believe that some benefit would result from the proceeding adopted. Had the injury to the cord been less extensive and its destruction less complete, the replacement of the bones might have been attended by a very different termination. It is always a very anxious question to decide in cases of spinal injury whether the surgeon is justified in carrying out any active treatment. Judging from what we saw in these cases, it would appear that when the injury has been produced by over-extension or a too free flexion of the spine, then interference is right and proper and may be attended by the best possible result. It might be suggested that in the attempt to reduce a displaced vertebra, we may very easily inflict additional injury on the cord. To avoid this we must always take care that the treatment is conducted with great discretion and gentleness, for rough handling can only end in disaster.

ROYAL UNITED HOSPITAL, BATH.

A NEEDLE IN THE BLADDER SIMULATING STONE; REMOVAL BY LITHOTOMY; RECOVERY.

(Under the care of Mr. HENRY W. FREEMAN, F.R.C.S.I.)

A LITTLE boy, under four years of age, was brought to the out-patient department of the hospital by his mother on Nov. 26th, 1884, suffering from bladder irritation, with symptoms of stone. The history elicited by Mr. Roberts, the house-surgeon, ran as follows: Difficult micturition, with screaming; pain commenced in August, 1883, accompanied with blood, sometimes more, sometimes less; and this condition of things continued for a year, when the bleeding ceased, and micturition, although painful, became bearable. The child had been sounded frequently for stone during this period, but nothing had been discovered, and as the symptoms were thought by the medical man in attendance to be due to phimosis, the boy was circumcised twice, but no relief in any way resulted.

On admission into the hospital Mr. Freeman, in conjunction with his colleague, Mr. Ransford, explored the bladder, under chloroform, and on passing a sound into the bladder a grating noise was heard when the instrument was held horizontally and in contact with the posterior portion of the fundus of the bladder, as if a phosphatic calculus were embedded in its coats; but when held vertically, and the curved portion rested on the most inferior portion of the organ, a distinct chink was heard, as if a smooth stone were struck. This, however, was very limited in extent, and it was noticed that the point of the sound could not be got round the foreign body to determine its size or shape. It was fixed. Digital examination of the rectum revealed nothing. The general consensus of opinion was, that a phosphatic calculus had become embedded in the walls of the bladder, and accordingly lateral lithotomy was performed by Mr Freeman on Dec. 6th. On opening the bladder, a sharp body was felt sticking in the anterior portion of the prostate, lying obliquely over the trigone, and resting against the posterior surface of the fundus, and encrusted with calcareous matter. A long pair of flat-pointed dressing forceps were introduced, and, after a little manœuvring, a small-sized "darning needle," measuring 1¾ in. in length, and covered for more than an inch with phosphatic deposit, was extracted. The deposit was ¾ in. in thickness, and included the sharp point, which was as thickly covered as the rest of the shaft; but the eye—blunt end—of the needle, for three-eighths of an inch, was smooth and free of deposit. There was no hæmorrhage. The child passed his urine by the urethra on the thirteenth day after operating, and, at the end of a fortnight, the urine, becoming excessively ammoniacal—due, as pointed out by Dr. Ray Lankester, to the presence of bacteria—and with a temperature of 102°, he was put on quinine, which speedily settled the thing in forty-eight hours; and, besides stating that the external wound was healed at the end of the third week, and that he contracted measles at the end of the fourth week, there is little to record, as he left the hospital well before the sixth week had expired.

Remarks by MR. FREEMAN.—Cases have been recorded where lithotomy has been done in boys where portions of slate pencil have found their way into the bladder by the urethra, but a needle in the bladder of a child, by whatever route it may have got there, followed by lithotomy for its removal, is of rare occurrence. The position of the needle in this small bladder seemed to me as if that portion sticking in the prostate dammed up in a measure the internal meatus, and the little constant whirlpools of urine around this portion of about half an inch explains why it was bright and gave the metallic ring when struck with the sound. We knew nothing of the needle history until after the operation had taken place, but the mother was positive that a "darning needle" such as we extracted had been swallowed by this child before her own eyes on Whit Sunday, May 13th, 1883. The needle, according to the mother's statement, was in the child's body about eighteen months, and the question arises how it found its way into the bladder. My first impression was that the needle had been thrust along the urethra by some precocious nurse girl, but the mother asserts that the child had never been out of her hands. Then came the history of its being swallowed, and if this was the identical needle, how did it get into such a receptacle as the bladder? Did it pass into the bladder by the rectum or by the small intestine; or, bearing in mind the anatomical relations of the ascending and descending colon to the kidneys, did it pass through the bowel into the pelvis of the kidney and thence by ureter into the bladder?

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

New Growths in Intestines.—Spondylolisthesis and other results of Pressure on the Spinal Column.—Lung Disease in Wild Animals.—Sudden Death from Impaction of Trachea by a Bronchial Gland.—Malignant Growth in the Forearm of an Infant.—Renal Cancer associated with Calculi.

AN ordinary meeting of this Society was held on Tuesday last, Dr. J. S. Bristowe, F.R.S., President, in the chair. Mr. Bland Sutton's communication on Comparative Pathology was warmly applauded.

Dr. NORMAN MOORE read a paper on Cases of New Growth in the Alimentary Canal. The first case was one of carcinoma of the cæcum spreading to the duodenum by direct contact in a woman aged forty-four, who was under Dr. Moore's care in St. Bartholomew's Hospital. There was ulceration over an extent of four inches in the cæcum, and the ileo-cæcal valve was invaded. A deep opening led from the inner part of the colon to the sixth inch of the duodenum by way of firm adhesions; this part of the duodenum was also infiltrated. The vermiform appendix was adherent to the cæcum, and also infiltrated. The subjacent organs were not affected. Only one small gland near the front of the cæcum was diseased. The patient had been ill since January, 1883,

and wasting from October till April, 1884. Pain in the right side, vomiting, diarrhœa, anæmia, and a slightly movable tumour lying between the ribs and iliac crest were the symptoms and signs noted. In two months the tumour became a little larger and rather less movable. The only constant symptom was general diarrhœa. There was no melæna. She died suddenly in August, and an adherent clot was found in each pulmonary artery. The second case was one of carcinoma of the descending colon spreading in direct continuity to the stomach of a woman aged forty-six, who was under the care of Dr. Gee. The new growth affected the middle part of the descending colon, and it was ulcerated at its base. The stomach was affected for about three inches, and there was a very large ulcerated hole in the stomach leading directly into the descending colon. The cancer was adherent to the parietes, and the fascia had begun to be penetrated. There were no secondary deposits. There had been pain in the left lumbar region since August, 1884, and the swelling appeared soon after, and continued to increase till death in Feb. 1885. Anæmia, slight melæna, and diarrhœa, and occasional sickness were the signs noted. Both these cases were remarkable as carcinoma spreading by direct continuity only, and both illustrated the difficulty of exact diagnosis in such cases. The age of the patient and the characters of the tumour were similar in each case, as were also the slight rise in temperature and the intense anæmia. Spread by direct continuity was only present in six instances out of twenty-four post-mortem examinations of cancer of the intestines made from cases in the medical wards of St. Bartholomew's Hospital during the past three years. In one case the new growth had opened from the stomach to the transverse colon. The third specimen was one of sarcoma of the descending colon taken from a man aged twenty-five; the symptoms were those of obstruction. There was a rugged new growth which included the whole intestinal wall of the upper part of the descending colon. It was a round-celled sarcoma of loose structure, and seemed to have grown in from the peritoneum. There were no secondary deposits. The illness lasted but a few weeks. The fourth specimen was one of sarcoma of the descending colon and ileum, spreading by direct continuity, taken from a man aged forty years. The new growth began about the middle of the colon, and there protruded as a pink and white mass without ulceration. The peritoneum and rectus abdominis were penetrated and a sinus opened externally. The ileum was adherent to, and penetrated by, the new growth. No glands and no remote organs were affected. The patient was under observation for one year. The sinus was due to surgical treatment. Acute peritonitis closed the scene. These two cases of sarcoma of the intestine resembled one another in the fact that both terminated in peritonitis, due to the rupture of the loosely-formed growth. In their continuous infiltration their natural history was similar to that of the two cases of carcinoma. These were the only two cases of sarcoma out of twenty-six cases of new growth of the intestines recently examined by Dr. Moore. These specimens show that a new growth may spread by continuity only, irrespective of its pathological nature. They illustrated the difficulty of determining in what direction and over what area any new growth may spread.—Dr. BRISTOWE asked what Dr. Moore meant by spreading in direct continuity. (To this the reply was a spread of the growth in a *right* line.) Dr. Bristowe then said that sarcomatous tumours were particularly rare. He had seen many cases more or less resembling those described by Dr. Moore. A male and a female case of malignant disease of the cæcum were referred to. There were no secondary growths; the spread was by continuity. After some pain a movable tumour appeared, which, in the case of the woman, might have been mistaken for a kidney. There was no disturbance of the bowels. Emaciation was progressive. The tumour was punctured, but nothing more than gas and fæcal matter escaped, and a superficial abscess formed. The case of the man was almost similar. A puncture was also made here, with the result of the formation of a superficial abscess. In other cases the colon and the stomach communicated directly as the result of the ulcerative disease.

Mr. ARBUTHNOT LANE described some of the changes produced by Pressure in the Spinal Column. He referred to a paper on spinal deformity produced in labourers by carrying heavy loads (Medico-Chirurgical Transactions, 1881), and showed that in most of these cases the weight was supported in great part by the much enlarged and thickened lumbar spinous processes, which articulated with one another by broad surfaces, surrounded by a capsule. The weight was supported also by the articular processes, which increased in size, and articulated by flattened extremities, with deep depressions in the opposing laminæ, especially in the case of the sacrum and last lumbar vertebra. As there was little tendency to forward displacement, the articular surfaces were simply flattened, and retained their inward and outward direction. In many cases osteophytic growth took place from the adjoining posterior margins of the sacrum and lumbar vertebræ. This might touch the enlarged sacral articular process, and sometimes almost obliterate the intervertebral foramen, probably causing irritation or destruction of the fifth lumbar nerve. In other cases, especially in those that are produced by carrying weights on the back, there was a marked tendency to forward displacement of the lower lumbar vertebræ, the fifth more particularly. In early cases this produced an alteration in the direction of the articular processes from a lateral direction to one looking forwards and backwards. The reason of this was obvious. The articulation between the body of the fifth lumbar vertebra and sacrum was rendered loose, so that by pressure forwards displacement could be produced. In more advanced cases, besides increased changes in the articular processes, permanent forward displacement of the fifth lumbar vertebra or spondylolisthesis ensued. In some cases there was an articular cavity between the two bones, while in others their opposing surfaces were irregular and were connected by dense ligamentous tissue. In these, by the approximation of the laminæ of the fifth lumbar and the posterior margin of the sacral facet, the intervertebral foramina were encroached on or obliterated, and the fifth nerve more or less destroyed. He showed two well-marked cases of spondylolisthesis produced in this way. One, in which there was no synovial space in the lowest fibro-cartilage, presented synostosis of both sacro-iliac articulations, distinctly caused by pressure. He had shown a similar specimen last year. He referred to two other instances of spondylolisthesis, which he had described in the last volume of the Transactions. In the dissecting-room this condition was not infrequently met with in the early stage. Dr. Neugebauer collected descriptions of seventeen specimens from various Continental museums, one of which, "Bassin de Praqua," closely resembled three of those that he (Mr. Lane) had described. This condition was certainly not so rare as Dr. Neugebauer supposed.

Mr. SHATTOCK said that Mr. Lane's arguments proved that there were other causes than that given by Neugebauer for spondylolisthesis. Neugebauer visited all the museums, and found only one specimen, which had come from a patient under the care of Dr. Hewitt. Neugebauer believed that there was a congenital defect of union between the arch of the fifth lumbar vertebra and its body. Mr. Lane's specimens showed that there was a want of continuity between the lamina of the fifth lumbar vertebra and its body; spondylolisthesis might be due to bending of the bones which were softened from senile atrophy.

Mr. J. BLAND SUTTON made an elaborate communication on Pulmonary Diseases in Wild Animals, in which he gave a general account of the zoological distribution of certain forms of lung disease among wild animals dying in the Zoological Society's Gardens during the past three or four years. The opinion held by the medical profession and the world at large that wild animals in captivity die from pulmonary tuberculosis lacked foundation, and was certainly erroneous. The conclusions drawn were founded on the following series of cases. From October, 1881, to December 31st, 1884, the total number of deaths was 2779, made up of 583 mammals, 1408 birds, and 788 reptiles. Of the 583 mammals there were 303 quadrumana, including 7 anthropomorphous apes. Of these mammals five died from pulmonary tuberculosis namely, a tree-porcupine, eyre, kinkajou, lagotis, and an agouti; only one case of general tuberculosis was seen, and that was in a coatimondi. It was remarkable that all these tuberculous animals came from South America and the tropical portions of North America, a region named by zoologists the "neo-tropical region." It differs from all the great zoological divisions of the earth's surface by the almost unequalled extent and luxuriance of its forests, its delightful climate, and the richness and variety of its animal life. It was also the home of the guinea-pig. Pneumonic phthisis had been seen in twelve cases, of which five

were monkeys and the rest carnivora. Even if these cases, by the utmost elasticity of the term "tubercle," be included, tuberculosis was a very infrequent cause of death in wild animals. The lungs in many of the cases of tubercle were examined by Dr. Heneage Gibbes for bacilli, and he found them present, not in thousands merely, but in millions. Dr. Gibbes has worked out some very important facts in connexion with these micro-organisms, but this part of the research was left entirely in his hands, and the results will be published in a separate paper. Since mammals in confinement did not die from tuberculosis, it became necessary to give an account of their fatal diseases. It might be broadly stated that each group of animals had certain forms of chest affections common to the group. Thus primates, excluding man, suffered from bronchitis, atelectasis, and lobular pneumonia. Carnivora were exceedingly liable to double pleurisies, lobar pneumonia, and bronchitis; whilst ruminantia had the peculiar disease known as "Perlsucht" (the so-called bovine tuberculosis), bronchitis, and "worm" bronchitis. It will be seen that bronchitis, zoologically speaking, was widely diffused, and this was to be accounted for by the vicissitudes of the English climate, in contrast to the tropical climate, to which many of these animals were accustomed. Although birds had been excluded from this report, so far as tuberculosis was concerned, yet there was one pathological condition peculiar to them which was of great interest. It was well known that in birds the bronchia were in communication with a series of membranous cavities known as air sacs. It happened, with especial frequency in waterfowl, that the lining membrane of these sacs inflamed, giving rise to exudation. This inflammatory matter coagulated, and often formed a covering half an inch in thickness, which formed an excellent nidus wherein the mould penicillium might luxuriate and form a thin layer throughout the entire series of these air chambers. Hunter, Owen, Müller, Robin, and others had noted the presence of mould in the air sacs of birds, but they all seemed to have overlooked the exudation. The interest of this condition lay in the fact that this mould did not confine itself to the air sacs, but even permeated the intercapillary air spaces of the bird's lung, which corresponded to the alveoli of the mammalian lung. In view of these facts, was it a matter for wonder that, in the human lung, vegetable organisms, a fraction of the size of the spores of penicillium, requiring similar conditions for existence, occurred, such as were recognised under the name of bacilli. It was impossible to narrate all the details of the numerous cases of pulmonary affections which were to be observed. The "field of work" such an inquiry opened up to those who had the leisure and opportunity was immense.—Dr. CARRINGTON remarked on the manner in which the tabulation of the kinds of diseases was made, as though the diseases perfectly differentiated; he would like to know more of the clinical history of these diseases.—Dr. BRISTOWE asked whether bacilli were found in cases of pneumonic phthisis and lobular pneumonia, to which Mr. SUTTON replied that the bacilli were not present in merely pneumonic cases.—Dr. CHURCH asked what proportion of the 303 quadrumana were subject to lung disease; the reply to this was 30 per cent.—Dr. COUPLAND inquired whether the bovine tuberculosis was identical with the tuberculosis of other animals.—Mr. SHATTOCK said that the bacillus was a vegetable; we might study the distribution of vegetables in relation to disease, just as Mr. Sutton had studied the distribution of animals in relation to disease.—Dr. PERCY KIDD did not understand whether the bacilli were present or not in pneumonic phthisis.—Dr. GOODHART asked for more information on "worm" bronchitis.—Mr. BUTLIN hoped that there would be more arrangement of the statistics when they were published.—Mr. SUTTON replied that he considered bovine tuberculosis to be different from human tuberculosis. Dr. Klein had shown that morphologically in the distribution of the lesions the bovine tuberculosis was different from that of man. With regard to "worm" bronchitis, this was a recognised affection of animals which was prevalent in young calves in wet weather, and had obtained the name of "hoose" from the curious cough. It was due to an immature worm which gets into the trachea and penetrates as far as the alveoli of the lung. The specimens of pneumonic phthisis contained more bacilli than those labelled simply tuberculosis.

Dr. PERCY KIDD showed a specimen of Caseous Gland impacted in the trachea and causing sudden death. The specimen came from the body of a boy aged seven. He was observed to have a croupy cough and somewhat stridulous breathing during life. No physical examination had been made. One night, after running about in the daytime and having complained of no urgent symptom, he suddenly awoke, screaming, coughing, and struggling for breath. He died in about ten minutes. At the autopsy the mediastinal glands were all enlarged and caseous; the enlargement was most marked in those glands lying in front of the trachea. The lower end of the trachea was blocked up by an oval partially softened caseous gland, which had been extruded through an ulcerated opening in the anterior wall of the trachea just above the origin of the left bronchus. The perforation led into an encapsulated space in front of the trachea, which contained caseous débris and traces of gland tissue. The lungs contained a few miliary tubercles in the upper lobes, but were otherwise healthy. The heart was firmly contracted and practically empty; it was quite healthy. All the other viscera were healthy. It was remarkable that, although the child evidently died of asphyxia, there was no distension of the right side of the heart after death.—Dr. GOODHART had seen a precisely similar case, and had published it with other cases of mediastinal gland disease. The child was younger. He thought that he had seen another case, but an autopsy was not made. In both cases there was antecedent bronchitis.

Mr. LOCKWOOD showed the specimen of a Malignant Tumour of the Forearm, taken from a child ten months old, which grew rapidly, and the child died from hæmorrhage three days after rupture of the new growth. The tumour appeared when the child was six months old. There was no enlargement of the lymphatic glands, liver, or spleen. The tumour seemed to grow from the interior of the radius; it was composed of embryonic tissue of the round-celled variety of sarcoma; no myeloid cells were seen. Congenital sarcomata of a similar nature had been described by Mr. Timothy Holmes as occurring in the orbits and head, but none had been put on record in this situation at so early an age.

Mr. BILTON POLLARD showed a specimen of Carcinoma and Dilatation of the Kidney, from which he had removed a large number of calculi during life. The patient was a man aged forty, who had had symptoms of renal colic for six months and had lost flesh. When first seen there was a tumour in the left lumbar region, in one part of which fluctuation could be detected, and the urine had an acid reaction, contained pus, but no blood. The kidney was sounded from the loin, but no stone was detected; nephrotomy was, however, performed, and forty-five calculi removed, together with a quantity of purulent urine. Much relief followed the operation, but the general condition of the patient did not improve, and the renal tumour did not shrink, as would have been expected if it had been merely dilated. Malignant disease was therefore suspected, and all idea of nephrectomy abandoned. The patient died of exhaustion two months after the operation. The left kidney was enlarged, due to cancerous infiltration of it and to dilatation of its cortical substance into numerous cystic cavities. In these cysts numerous calculi were found. The specimen was shown partly on account of the rarity of carcinoma of the kidney, and partly on account of its bearing on the etiology; the calculi appeared to be the primary pathological product, and the carcinoma a secondary one, probably resulting from irritation. The frequent absence of profuse hæmaturia in new growths in the kidney was insisted upon, and attention was drawn to the failure of an attempt to feel the calculi with a needle introduced from the loin, notwithstanding the great number of the calculi. The wide implication of the lymphatic glands and the extension of the primary growth beyond the kidney showed that any attempt to remove the entire diseased structures would have been futile and unwarranted.—The PRESIDENT said that the question as to whether irritation of the calculi could set up cancer of the kidney was important.—Dr. HADDEN had made necropsies of three or four cases of malignant disease of the gall-bladder, in which calculi were present and appeared to have induced the disease.—Dr. GOODHART said that there seemed to be but little doubt that cancer of the liver could be caused by gall-stones. In the Pathological Transactions, cases of this sort had been recorded, and also one of cancer of the bladder by Dr. Fagge, where the irritation of a stone seemed to be causative. Frequent catheterism was also alleged as a cause of cancer of the bladder.—The PRESIDENT said that it was well known that renal and biliary calculi were associated with cancerous disease of the viscera.—Dr.

NORMAN MOORE thought there must be some other factor in the production of the disease. There was chronic inflammation of the bile passages and neighbouring intestines, but nothing like cancer, in a chronic case of gall-stones which he had observed.—Dr. LONGHURST made some remarks on the relation of direct irritation to cancer of the lip and elsewhere.—The PRESIDENT said that the lining membrane of the kidney still remained entire; the cancer appeared to infiltrate the whole organ; there was no prolonged history of renal colic, and it was uncertain what the relation of the association was.—Mr. BUTLIN said that there was a difference between the direct irritation causing cancer of the lip and tongue and that of a calculus acting on the tissue of the liver or kidney; for, in the latter case, the seat of the irritation was at some distance from the point where the cancer first appeared.—Mr. BILTON POLLARD, in reply, said that the cancer apparently commenced at that part of the kidney from which the calculi had been removed during life. It seemed certain that the calculi preceded the cancer; probably the tumour was almost solely pyonephrotic until the time of the operation.

The following card specimens were shown:—Dr. Gulliver: Syphilitic Ulceration, with Cicatricial Constriction of the Trachea. Dr. S. West: Specimens of Mediastinal Tumours. Mr. Clutton: Large Vesico-vaginal Calculi. Mr. Sheild: Blood-clot from the Surface of the Brain. Mr. D'Arcy Power: Typical Adenoma of Breast. Dr. Hale White showed a recent Specimen of Suppurating Hydatid Cyst about the Liver, and also a Hydatid Cyst in Process of Healing, which opened into the duodenum, as well as externally through the abdominal wall.

CLINICAL SOCIETY OF LONDON.

President's Address.—Myxœdema.—Sudden Death in Phlegmonous Pharyngitis.

AN ordinary meeting of this Society was held on Feb. 13th, Mr. Thomas Bryant, F.R.C.S., President, in the chair. The President, on taking the chair for the first time, read an inaugural address, of which the following is a brief abstract:—He said that the Society had already done good work, but it was allowable to hope that that to be achieved in the future may be still better. He thought that our ideas were so constantly nothing more than the assimilation of the thoughts and observations of other men, that it was almost impossible to be original. The next point discussed was the want of care in the use of terms. "Strumous" disease was a term the meaning of which was probably very different, according to the beliefs of the individual. It would be interesting to have in writing the definitions of these phrases from the individual members of the Society. Then, with regard to the phrase "antiseptic precautions," what did it mean? To some, no doubt, it implied the "spray and gauze" system; to others it meant some sort of antiseptic irrigation, whilst to yet others it signified the use of some antiseptic either as a dry or moist dressing. He considered, further, that sufficient discrimination was not made between cases of intestinal strangulation and those of intestinal obstruction; the two conditions were widely different from one another. Again, is it not most important that we should have clear views on such general and elementary subjects as repair and inflammation? Experience led him, as an examiner of students, to believe that over this subject there is considerable confusion. In the treatment of a wound is it not the surgeon's chief object to prevent inflammation? When a granulating wound becomes the seat of inflammation the reparative process at once ceases, and what had been a granulating soon becomes an ulcerating surface. Is it not incumbent on all teachers to enunciate that repair and inflammation are not only not identical, but that they are incompatible? The one is a formative, the other a destructive, process. He also drew attention to a few practical points, such as the application of two ligatures to arteries in their continuity with division of the vessel between the ligatures; this was the practice of the last century; he did not intend to criticise this practice, for he looked on it with favour. It would be interesting if full particulars of the results of this revived method could be obtained during the present session. Again, he asked whether there was any truth in the accusation, made in recent times, that the great successes which surgeons have achieved in surgical operations had led them to undertake operative measures which might with some justice be looked upon as speculative, if not rash. Had our successes engendered an over-estimation of our own powers and led us to attempt to perform operations which past experience has not supported, and which seemed to be less founded on scientific probabilites of success than on the sanguine hopes of their performers? Are the operations upon the pylorus or stomach, for cancer, to be placed in this category? Are there other operations which should be so classed? We should avoid even the semblance of an experimental operation. He next remarked upon the kind aid which the surgeons received from the physicians in respect of such surgical work as the diagnosis of disease of the brain, kidney, bladder, and abdomen. And we were thus, with a clearer diagnosis, mutually helping to bring within the domain of scientific surgery large classes of disease which had hitherto been deemed to lie outside the pale of practical surgery. Might we not ask for even more help in this direction, and urge our medical *confrères* to seek surgical conference early, at least in all abdominal cases in which symptoms of intestinal strangulation exist, as well as in all cases in which intestinal obstruction is present?

A vote of thanks for the address was proposed by Dr. J. G. GLOVER, seconded by Mr. PICKERING PICK, and carried with acclamation.

Dr. W. HALE WHITE read a paper on a case of Myxœdema with a Post-mortem Examination. This case is the same as has been previously recorded in the Society's Transactions for 1882, page 98. From that year till June, 1884, the patient disappeared from observation. On June 12th, 1884, she was admitted into Guy's Hospital for ascites. There was still some evidence of myxœdema in the hands and face, but it was much less. The speech was slow. The abdomen was tapped, five gallons and five pints of fluid were drawn off; after this she had epileptiform convulsions, passed into the status epilepticus, and died. At the post-mortem examination there was found a small old hæmorrhage in the left corpus striatum, the vessels of the brain were thick, the thyroid was much atrophied, there was much pigmentation of the peritoneum from chronic peritonitis, the intestines were matted together, and there was perihepatitis. The heart, lungs, cervical glands, alimentary tract, spleen, pancreas, suprarenals, mesenteric glands, sympathetic ganglia, kidneys, bladder, genital organs, pituitary body, muscles, and toe-joints were all healthy. The liver showed proliferation of nuclei in the intercellular connective tissue and much deposit of fat in the centre of the lobules. The submaxillary gland showed slight increase of nuclei between the walls in the connective tissue, which seemed to have a sodden and swollen appearance. The thyroid body exhibited the remnants of vesicles, which contained much epithelial débris; the connective tissue was degenerate and sodden looking, although here and there was some evidence of a mild inflammatory condition. The sympathetic ganglia were healthy; the condition of the connective tissue was the same as that already described. The spinal cord and sympathetic nerve were normal, except that the connective tissue was like that in the ganglia. No other histological abnormality was discovered. This histological examination of the organs goes to show that the atrophy of the thyroid is the cause of the disease, because all the changes excepting this are probably secondary, and due to a myxœdematous affection of the tissues. That the sympathetic is not the cause of the disease is probable from the following considerations: first, in the case in which accessory thyroids were present no myxœdema followed excision of the gland, although there the sympathetic must have been pulled upon; secondly, the cells and nerve fibres in the sympathetic ganglia were quite healthy; thirdly, myxœdema has never been observed to follow the numerous physiological experiments in which the sympathetic has been excised. It is hardly likely that an organ like the thyroid, with four large arteries and six large veins, should not have some important function. No opinion as to disease of the sympathetic ought to be expressed from the mere size of the ganglia, as this varies much in the healthy body.—Mr. VICTOR HORSLEY said that with regard to the absence of such symptoms as tremors it should be remembered that they tended to disappear as the disease advanced. In a case of congested thyroid, which might also be described as a case of acute myxœdema, he had observed tremors of a marked kind. He pointed out that epilepsy was very frequent in cretins, and though the fits might be due to other causes,

yet the arrest of function of the thyroid might also explain their occurrence. With regard to the histology of the thyroid gland, there were merely collections of embryonic tissue to be seen in Dr. White's sections which might be described as an intermediate stage between the healthy thyroid and the complete destruction which obtained in a specimen of Dr. Ord's, where there was scarcely any of the embryonic tissue; the same changes were to be found in the experimental disease. As Wölfler first showed, this embryonic tissue normally exists about the capsule of the thyroid body.—Dr. DE HAVILLAND HALL said that in the presence of albuminuria it seemed natural to attribute the epileptiform attacks to uræmia.—Dr. W. B. HADDEN considered that the fits were sometimes due to the disease. In the investigation being made by the special committee on myxœdema, convulsions were found to have been present in a considerable proportion of the cases. The changes in the thyroid were allied to the alteration found in cirrhosis of liver and in chronic interstitial hepatitis. He had met with a case of myxœdema in which the history showed that a sister also suffered from exophthalmic goitre, and there might be some connexion between these diseases, both of which involved the thyroid.—Dr. SÉMON said all that had as yet been discovered confirmed the hypothesis he had advanced, that cretinism, cachexia strumipriva, and myxœdema were but one and the same disease. It was important to know what was the cause of the arrest of function of the thyroid. From a study of many cases he had come to the conclusion that the first change was one of cerebral anæmia, as manifested by such symptoms as giddiness and faintness. Reference was made to a case in which for the first period, which lasted five years, the signs of cerebral anæmia were most marked. It was possible that the cerebral anæmia led to trophic changes in the thyroid body, as well as indirectly to the other symptoms.—Dr. CARRINGTON said that it would be equally difficult to explain the cause of the cerebral anæmia on Dr. Sémon's view. In cases of severe chlorosis and of pernicious anæmia the symptoms of myxœdema did not supervene.—Dr. GOODHART could not think that the sympathetic system was exonerated because we had not found any structural change in the ganglia; he considered that there was a close analogy between the causation of Addison's disease and myxœdema. The gland concerned in each disease might be destroyed by cancer, &c., without giving rise to the characteristic symptoms. It seemed clear that Addison's disease was due to lesion of the sympathetic nerves, though no structural changes were to be found microscopically. Considering these things he thought that sympathetic "worry" might still be at the root of myxœdema.—Dr. HALE WHITE said, in reply, that he could not say more of the epileptic fits, as he simply copied from the late Dr. Mahomed's report. With regard to the view that the sympathetic system was at fault, he thought it proved too much; moreover, none of the ordinary symptoms of a lesion of the sympathetic were present.

Drs. R. E. CARRINGTON and W. HALE WHITE read a conjoint paper on two cases of Phlegmonous Pharyngitis. The patients were seized with intense dyspnœa, and tracheotomy might or might not be performed. The operation, however, appears to be entirely useless, the general, and not the local, condition apparently leading to the fatal issue. The first case was that of a man aged forty-six, who was admitted into Guy's Hospital in the early morning. He had been ill for seven days, some days being in bed, on others at work. He was admitted with laryngeal stertor, but no marked dyspnœa. He was placed in a tent with the steam spray and watched, but in the course of a few hours he died quite suddenly, before the house-surgeon could be summoned. At the autopsy, all the soft tissues of the pharynx were œdematous; and on the right side, from the tonsil downwards for two inches, the mucous membrane was minutely injected and swollen with œdema; yellow spots of pus existed here and there. The same condition had spread into the tissues of the epiglottis. On the left side the œdema was serous only. There was very little narrowing of the rima glottidis. With the exception of subpleural ecchymoses, there were no other noteworthy points discovered. The second case was that of a medical man aged forty-nine, who was admitted into Guy's Hospital on November 10th, 1884. He was suffering from dyspnœa, apparently of moderate intensity, but he himself came to the hospital for the purpose of having tracheotomy performed. He walked up to the ward and was placed in a tent with a steam-spray apparatus. It was decided, after consultation with Mr. Clement Lucas, to perform tracheotomy three hours after admission. Just as he was about to be removed to the table he was seized with spasm of the glottis, and the operation had to be performed in the bed. Artificial respiration had to be resorted to, and was so far successful that he began to breathe spontaneously. He was then seized with an epileptiform convulsion, and ceased to breathe again. Electricity, subcutaneous injection of brandy, and other means were resorted to, and he again began to breathe feebly. He revived so far as to take a draught of milk. All seemed well, and arrangements were made for leaving him under supervision, when he again ceased to breathe. Efforts were maintained to bring him round for a full hour, but unfortunately were not successful.—Mr. HARRISON CRIPPS spoke of the case of a healthy girl who had had gonorrhœa, and soon after suffered from sore-throat; the next morning the left side of the face was swollen, and this swelling spread considerably down the neck, and was accompanied by dyspnœa, which was so severe that tracheotomy was decided upon; chloroform was given, and in two minutes the patient ceased to breathe. The interest of the case seemed to lie chiefly in the treatment. There was a large amount of serum thrown out, for the incision necessary for tracheotomy gave vent to so much serum that it made an obvious difference in the swelling during the half hour that artificial respiration was resorted to. Acute œdema of the neck was therefore most dangerous, and ought to be treated by free incisions into the skin, and perhaps scarification of the pharynx and laryngeal folds. From his experience of cases of dyspnœa he considered that all operations, where this symptom was urgent, should be performed without an anæsthetic.—Mr. HOWARD MARSH said that apparently these cases of phlegmonous inflammation had not attracted much attention, though Porter of Dublin had written on them in a book entitled "Diffuse Cellulitis of the Neck." Mr. Marsh had had about three cases of the kind under his care. In the first case the patient had suffered for twelve hours from obstruction in the larynx; later on swelling appeared in the parotid region and upper part on one side of the neck, and spread rapidly across the middle line, so that this "succulent œdema" was most extensive; it was accompanied by severe prostration and a low temperature. This case went on to diffuse and widespread suppuration, which spread down into the anterior mediastinum; gangrenous inflammation supervened, many incisions were made, and the laryngeal tissues scarified; a horribly offensive expectoration was present; and notwithstanding quinine and stimulants, death ensued from asthenia.—Dr. GOODHART considered that the class of cases described by Dr. Carrington ought to be separated from those referred to by the previous speakers, and which were also known as angina Ludovici. In Dr. Carrington's cases there was no marked swelling of the neck, and sudden death occurred, whilst there was no great degree of dyspnœa. The condition of the pharynx was most peculiar; it had a brawny aspect, and might be followed by suppuration in a short time; albuminuria was often present. It was difficult to say what precise relations this inflammation had to diphtheria.—A MEMBER related his own case of acute œdema of the larynx. At midday on June 23rd, 1873, he was attacked with shivering, and later found he was unable to swallow and had difficulty in breathing. Mr. Christopher Heath performed tracheotomy, and the tube was removed on the fifth day. Erysipelas or exposure to cold and wet might have caused the malady.—Dr. F. SEMON said that very dissimilar conditions had been spoken of. Some cases of phlegmonous pharyngitis seemed to be directly caused by poisonous influences, such as were at work in the causation of erysipelas and pyæmia. He related a case in which the left half of the larynx was infiltrated, and there was a temperature of 104°; the patient died, and the necropsy showed many collections of pus in the neighbourhood of the larynx, and pus was also found in the metacarpal joints of the hand.—Dr. BERNARD O'CONNOR said that poisoning from sewer gas was the cause of some of the phlegmonous inflammations.—Dr. CARRINGTON said that many of the cases referred to were essentially distinct from those he had described, for the neck was not appreciably affected, the larynx seemed perfectly healthy, and tracheotomy was useless.

Dr. SEYMOUR TAYLOR showed a living specimen of arrested Rickets in a male child aged seven years; there was most marked deformity of the trunk and limbs, with remarkable arrest of growth.

MEDICAL SOCIETY OF LONDON.

Total Amputation of the Penis.—Progressive Anæmia.—Cases of Paralysis Agitans.—Necrosis of Labyrinth.

AN ordinary meeting of this Society was held on Monday last, Mr. Arthur E. Durham, F.R.C.S., President, in the chair.

Sir WILLIAM MAC CORMAC showed a man aged sixty, in whom he had amputated the whole of the Penis for Epitheliomatous Disease. Micturition was effected per urethram, which opened behind the scrotum, by making a longitudinal slit in the divided urethra and stitching its edges to the skin in the perineum. The operation was first done by Thiersch in 1875, and in this country by Mr. Pearce Gould.

Dr. D. W. FINLAY read a paper on a case of Progressive Anæmia, which will appear in our columns next week.—Dr. COUPLAND said that Dr. Finlay's case belonged to that category to which Addison first drew attention, and which usually ran a fatal course. He believed it was impossible to draw any hard-and-fast line between cases which recover and those which prove fatal. Mention was made of a case of chlorosis in a young woman, which improved slightly under treatment by iron for three or four weeks, and then, without apparent reason, ran a steadily progressive downward course—œdema and hæmorrhages setting in. The age of Dr. Finlay's patient was the usual one at which this form of idiopathic anæmia occurs. The pathology of the disease remained most obscure.—Dr. K. FOWLER referred to a certain method of treatment recommended by Niemeyer, which consisted in giving large doses of carbonate of iron in the form of five-grain pills, made by mixing half an ounce of sulphate of iron and the same quantity of carbonate of potash.—Dr. WHITE referred to a case of anæmia in a woman aged forty-two, in which Niemeyer's treatment had signally failed; arsenic and iron were also useless.—Dr. SANSOM said in his experience the red blood-discs were much altered in size and shape, and there was much granular matter in masses distributed through the blood. As to the causation, it was possible for septic influences to play a part in some cases.—Dr. MILLER ORD thought that anæmia was a disease thoroughly wanting in unity. He considered that the alteration in the shape and size of the corpuscles was a notable feature in cases of progressive pernicious anæmia. Spectroscopic examination of the blood of pernicious anæmia showed the same bands as healthy blood. The chemistry of the blood in cases of pernicious anæmia was unknown, and the number of changes in the physical characters of the blood was very great.—Dr. FINLAY, in reply, said that he did not think the ague had anything to do with the etiology of his case. He had not noticed any conspicuous difference in the sizes of the red blood-corpuscles.

Dr. BEEVOR read a paper on cases of Paralysis Agitans without Shaking. One case without shaking was shown, and one with slight tremor only. After describing the symptoms of paralysis agitans other than tremor, the first case was given in detail. It was that of a farrier aged forty-nine, who felt weakness five years ago first in the left arm, then in the left leg, and in a year's time there was weakness first in the right leg, and next in the right arm. He has never had any tremor. At present there are: fixed attitude of the whole body, rigidity about the neck, with difficulty in looking upwards; expressionless countenance; slow, delayed movements; difficulty in rising from his seat and in walking. He has had retropulsion; the voice is monotonous and mumbling, and in speaking the lips only move; feelings of heat and restlessness are experienced. He has lost the finer movements of the hands, but the grasp is almost normal. His writing is rather wavy, especially in the up-strokes. Another patient, a carpenter sixty-two years old, had been under observation for five years. Eight years ago he began to walk with short steps, and this was followed by stiffness about the neck and general weakness. Now he has the characteristic fixed attitude, but no tremor; the face is expressionless; the speech monotonous; the movements of the hands slow, and with loss of fine movements. He rises slowly from his seat, and walks with short steps; there is propulsion and retropulsion. The writing is very bad, but not quite characteristic. He has sometimes had very slight tremor of the tongue. The next case shown was one of Dr. Gowers' patients, who had very slight tremor, involving specially the flexors and extensors of the elbows (not of the hands), particularly the left. He is forty-seven years old and a bricklayer. Five years ago, without any previous cause, he began to feel weak in the left hand, with loss of the finer movements, followed by weakness of the left leg and stiffness in both limbs. After a time slight shaking appeared in the left arm. Two years later the right arm and leg became similarly affected. A year later rigidity of the back and neck came on. He has now the typical fixed attitude, and moves his body as a whole; there is difficulty in rising from his chair, and he walks with short steps. Retropulsion has been present for the last twelve months. The face is expressionless, the tongue slightly tremulous, and the speech is quite characteristic. He also presents a symptom not before described in paralysis agitans—namely, on looking to the right or left the eyes move first, and after a slight interval the head follows. In this case the thigh muscles seem to respond more readily to direct percussion than in health. Another patient, aged seventy-three, a shoemaker, had difficulty twelve months ago in executing fine movements with the left hand, which gradually became weaker, and at the same time he began to have difficulty in moving the left leg. He has a general fixed attitude, slight stiffness of the neck, a slow gait, and difficulty in rising from a chair; stiffness and weakness of the left arm and leg; the left hand is typical of paralysis agitans with a loss of the finer movements; there is restlessness with a sense of fatigue. The knee-jerks are both well marked, the left more than the right; and there is slight left ankle clonus. About this case the diagnosis was not so certain, but the onset seemed too slow and gradual for hemiplegia, and there were no symptoms of disseminated sclerosis. It was remarked that the first patient was an undoubted case of paralysis agitans without movement, and attention was directed to the presence of slow movements and subjective weakness, yet with a normal grasp of the hands; and although the disease has existed for five years there is no tremor. The case with slight tremor was shown as an intermediate type between the well-marked cases and those without tremor. The case had been under observation for five years, but no tremor has been detected. With regard to the literature on the subject, Charcot, in his "Diseases of the Nervous System," had published two cases without movement; and a case of Dr. Gowers was also referred to. Dr. Buzzard has also published a case in his "Diseases of the Nervous System," of which the symptoms were briefly given. From the long duration (eight and five years) of two of the cases, it seemed possible that paralysis agitans might run its whole course without any tremor being present.—Dr. HADDEN asked whether there was a history of traumatism in these cases. An easy way of producing the festination or retropulsion was by using gentle pressure forwards or backwards on the head.—Dr. MILLER ORD spoke of the case of a man in which the attitude was typical, and in which retropulsion and festination were present; there were nystagmus and exaggerated knee-jerks, and on exertion well-marked tremors were developed.—Dr. BEEVOR said there was no history of injury in his cases. He mentioned the case of a woman in whom the disease supervened on fright. He had used the method referred to by Dr. Hadden.

Mr. WALTER PYE showed specimens of Necrosis of the Labyrinth. The patient from whom the sequestrum was removed was a girl aged four and a half years, and there was an abscess behind the ear. There was absolute deafness on the diseased (left) side; there was complete paralysis of the portio dura, and corneal irritation was present. The sequestrum was removed by opening the abscess and enlarging the wound, so as to allow of the withdrawal of the irregular-shaped mass of bone.

OBSTETRICAL SOCIETY OF LONDON.

THE annual general meeting of this Society was held on Wednesday, Feb. 4th, Dr. Henry Gervis, President, in the chair.

Mr. THORNTON showed Two Dermoid Cysts removed during Pregnancy.

Dr. M'KEOWN of Manchester read a paper on the Prevention of Ophthalmia Neonatorum and its Ravages. The author pointed out that the text-books and lectures on midwifery should deal fully with the etiology, progress, and treatment of ophthalmia neonatorum, and that midwives

should be taught, and required to understand their duties with regard to the disease. Infective matter in the genital passage of the mother is a frequent cause—it has been stated to be the only cause; and hence attempts have been made to prevent the disease by treatment applied to the vagina before delivery, and to the child's eyes immediately after birth. It was claimed that by vaginal injections the frequency of the affection had been diminished, and by some that by treatment of the eyes the disease had been prevented. Abolition of the disease was stated to have been obtained by Credé in 499 cases by washing the eyes with pure water and then applying a 2 per cent. solution of nitrate of silver. At the Stuttgart Maternity, by Credé's plan a large reduction in the frequency had been effected (*a*) by the nitrate of silver treatment in the wards of Professors Carl and Gustav Braun, where, of more than 3000 births, only 1·93 per cent. were affected, whilst of 1887 born at the same time, but not similarly treated, 4·34 per cent. were affected; (*b*) by Professor Olshausen, who, by washing the eyes with a 1 per cent. carbolic solution, reduced the percentage from 12·5 to 6 per cent.; (*c*) in the practice of Professor Simpson, by the nitrate of silver treatment; (*d*) of 2266 births in the practice of Dr. Abegg, who washed the eyes immediately after birth with pure water, only 3 per cent. were affected; (*e*) reduction in the frequency had also been obtained by Bischoff, who, by vaginal carbolic injections and washing the eyes with salicylic lotion, reduced the percentage from 5·6 to 2·6, and also by Credé, by vaginal injections (carbolic and salicylic). These results warranted an extensive series of investigations in order to determine to what extent the occurrence of ophthalmia neonatorum might be prevented, and what methods of treatment yield the best results. These points could be settled only by those in obstetric practice. Inquiries were needed regarding, first, the influence of cleansing and disinfection of the genital passage of the mother previous to delivery. Was this a plan of treatment which might be adopted as a routine practice in every case of labour? Secondly, the influence of simple cleansing, and astringent treatment of the eyes immediately after birth. The entire treatment of the eyes should be in the hands of members of the profession, and investigations should be made in the various lying-in hospitals of the country by the resident medical officers of those institutions.—Dr. GRAILY HEWITT remarked that although our knowledge of this disease had greatly improved, the difficulty of diffusing this knowledge among those entrusted with the early management of infants remained. To this end the Obstetrical Society was able to contribute largely. Some years ago the Society drew up a most valuable code of instructions for the management of infants, which had proved most useful, and was largely sold by Messrs. Longmans at a nominal price. He suggested that a paragraph should be added to these rules containing the necessary information with regard to ophthalmia neonatorum, this paragraph being drawn up by the Council. The main object was to emphasise the danger of the disease, as well as the necessary preventive measures. Students attending cases of midwifery should also have their attention drawn to it.—Dr. CLEVELAND proposed that a copy of these rules should be sent to every Fellow with the next volume of the Transactions. This was seconded by Dr. ROPER.—Dr. WILLIAM DUNCAN said that the great majority of the cases occurred among the lower orders. He had made a rule at the Middlesex Hospital that all cases of ophthalmia neonatorum occurring in the maternity department should be sent at once to the ophthalmic surgeon. He strongly deprecated students and midwives being encouraged to treat these cases.

The PRESIDENT said he had been requested to call attention to the series of questions on puerperal pyrexia published by the Collective Investigation Committee in the *British Medical Journal* of the preceding week, and to ask the co-operation of Fellows.

Certain changes in the laws were then explained by the PRESIDENT, and adopted by the Society, as were also the various reports of the officers. The list of officers and councillors proposed by the Council was declared by the scrutineers of the ballot to have been adopted by the Society.

The PRESIDENT then delivered the annual address, which will be found in THE LANCET of Feb. 14th.

A vote of thanks to Dr. Gervis, the retiring President, was proposed by Dr. GRAILY HEWITT, seconded by Dr. PLAYFAIR, and carried unanimously. The speakers referred to the unfailing urbanity and courtesy with which Dr. Gervis had presided over the Society, which had been a matter of common remark. This was combined, when necessary, with firmness, both in the Society and in the Council. The remarks of the speakers were most cordially received.

The proceedings terminated with votes of thanks to the retiring treasurer (Dr. Potter, President elect), and the retiring Vice-Presidents and members of the Council.

CAMBRIDGE MEDICAL SOCIETY.

AT the meeting on January 2nd, Dr. P. W. Latham, president, in the chair,—

Mr. HYDE HILLS read the notes of a case of Delirium Tremens in which he had used Hyoscyamine. He was called up one morning to see a fine healthy looking man, aged thirty-four, who had been drinking a bottle of brandy a day for ten days, but had taken none for the last twenty-four hours; he had not slept for three nights and was now delirious, with the usual symptoms. Mr. Hills administered a quarter of a grain of hyoscyamine in a little brandy-and-water at 4.30 A.M.; and at 7.30, being still restless and noisy with dilated pupils, a second dose of one-sixth of a grain was given. At 1.30, as he did not sleep, one-third of a grain was administered, after which he remained quiet for about two hours. At 9.35 P.M., though still showing the effects of the drug in dilated pupils and dry tongue, he was given five-twelfths of a grain. He had a restless noisy night, and was worse than ever. His pulse was 120; he complained of thirst, and had taken no nourishment for thirty-six hours. At 5.45 A.M., or twenty-five hours after the first dose, he was given seven-twelfths of a grain; he was soon quieter, and in two hours was asleep. In the morning he was quite right, and soon recovered. The same drug was used in five other cases of delirium tremens. In three cases a quarter of a grain given at bedtime produced sleep, and was not again required. In two a quarter of a grain was given ineffectually, but one-third of a grain in the morning had the desired effect, and both recovered. In a case of mania a third of a grain produced rather alarming symptoms. Mr. Hills had no doubt of the efficacy of the drug in these cases. His practice was to give a quarter of a grain first, and, if necessary, increasingly larger doses every six hours in some alcoholic beverage. Merck's solution of the amorphous hyoscyamine was the preparation used.—Mr. CARVER had used the drug on two occasions. In one case of delirium tremens after bromide of potassium and chloral had failed, small repeated doses of hyoscyamine quieted the patient within twelve hours.

Mr. WALLIS narrated a case in which he had performed Perineal Section for Cystitis in Fractured Spine, in a man admitted into the hospital with fracture of the cervical spine, and in whom severe cystitis was rapidly bringing on a fatal result. The operation was performed in the usual manner, and a long elastic tube inserted. The result as concerned the cystitis was immediately beneficial, and the patient rapidly rallied from his dying condition and gained flesh. He died subsequently from other complications.—Mr. WHERRY quite concurred in the beneficial results obtained by perineal section in this case, and drew attention to the trouble caused by the accumulation of phosphatic deposits round the tube.

Mr. WALLIS related two cases in which he had used Cocaine with satisfactory results: a case of foreign body in the cornea, and before the treatment of corneal ulcer with nitrate of silver.

MIDLAND MEDICAL SOCIETY.

AN ordinary meeting of this Society was held on Jan. 21st, Mr. T. H. Bartleet, F.R.C.S., President, in the chair.

Mr. BENNETT MAY showed a girl whose Common Carotid Artery he had Ligatured for Hæmorrhage from the External Auditory Meatus, undoubtedly due to erosion of the internal carotid artery, occurring during the fourth week of an attack of scarlatina. The case had been previously reported to the Society in an incomplete form. Since then certain nervous symptoms which attended the application of the ligature had been investigated by Dr. Suckling, whose report was appended. The girl had thoroughly recovered, and Mr. May remarked that the case appeared to be the

only successful one of the kind recorded. Politzer stated that thirteen cases of a similar nature are to be found scattered throughout surgical literature, and that every one of them had terminated fatally.—Dr. SUCKLING read a report on the nervous symptoms in the above case.

Dr. MALINS showed a Uterus removed by Elastic Ligature.

Dr. SUCKLING showed a case of General Paralysis of the Insane. The man, aged thirty-six, had been unable to follow his employment for the past eighteen months on account of his mental disorder, which was characterised by forgetfulness and irritability when in any way interfered with. The condition of *bien-être* was well marked. There was marked tremor of the lips, tongue, and facial muscles, especially when put in action; there was also inequality of the pupils. No history of excess could be obtained.

Mr. LAWSON TAIT read a paper entitled General Summary of Conclusions from 1000 Cases of Abdominal Section. Mr. Tait first considered the question of anæsthetics, and stated that he preferred a mixture of two parts of ether and one part of chloroform given in a Clover's apparatus; this mixture he found did not cause bronchitis, and did not diminish the excretion of urine, and was less often followed by vomiting than any other anæsthetic he had used. He defined the term "abdominal section" as an operation in which the peritoneum was involved. Mr. Tait also presented an analysis of his cases, in all of which the peritoneum had been involved. The general death-rate was 9·3 per cent. Mr. Tait gave as the explanation of the much lower death-rate of his later operations the following reasons: (1) Greater experience; (2) the complete discontinuance of the clamp in ovariotomy and of the ligature in hysterectomy; (3) also the earlier stages of the diseases at which operation is now done. Mr. Tait laid great stress upon the last factor in influencing the mortality after operations.

Reviews and Notices of Books.

Clinical Lectures. By RICHARD QUAIN, F.R.C.S., F.R.S. London: Smith, Elder, and Co. 1884.—It is with much pleasure that we welcome the appearance of these clinical lectures, by an author whose name will live in his well-known plates illustrating the Anatomy of the Arteries of the Human Body. It must have been a source of entertainment and occupation to Mr. Quain to re-edit these clinical lectures, recalling as the labour must have done many of the past experiences of an active life. The volume is a costly production, illustrated by forty plates, many of which are beautifully coloured and are very valuable as pictures of rare specimens of disease. Plate XXXIII., fig. 2, is described as cholesteatoma testis; from the drawings and descriptions of this specimen we should feel almost certain that we had to do with tubercular disease of the organ in question. Plates XIV. and XV. are admirable representations of advanced rheumatoid arthritis of both hip joints, or, as we should prefer to think after reading an account of the case, of Charcot's joint disease. These two examples will serve to show some of the directions in which science has advanced since Mr. Quain took an active part in pathological work. The production of a work of these dimensions cannot have been made without considerable expenditure of time and energy, and when we remember Mr. Quain's years, we feel that he is to be cordially congratulated on the accomplishment of his task.

A Text-book of Operative Veterinary Surgery. By GEORGE FLEMING, LL.D. With numerous Illustrations. Pp. 266. London: Baillière, Tindall, and Cox. 1884.—This work does not profess to be a manual of veterinary surgery, but is intended to supply a want which has been long felt—an intelligible and practical description of the manual details of the various operations which it may be necessary to perform on animals. It does not, therefore, treat of the diagnosis of injuries, but takes up the subject when it has been decided to perform a surgical operation, and describes the manner in which, and the instruments by means of which, this may be done, with full instructions as to the measures requisite to prevent, or at least diminish to the utmost, the dangers to be apprehended from the struggles of the animal. In an introductory chapter Mr. Fleming points out forcibly the necessity for a sound knowledge of anatomy, physiology, and pathology for the successful practice of surgery. "As in clinical medicine, so in surgery, skill in *diagnosing* is an important element of success.....A great secret of success is to know when to act and when to abstain." The book is divided into two parts. The first treats of the manner of securing animals for operation; the employment of anæsthetics; and elementary operative surgery, including bandaging and dressing wounds. The second part, under the head of General Operations, includes the *operative* treatment of dislocations and fractures; the removal of tumours; cauterisation; galvano-puncture or electro-puncture; setons; injections; inoculations; operations on bloodvessels, muscles, tendons, nerves, and fasciæ; amputations; and extraction of foreign bodies from wounds. In addition to the description of the mode of operating, the book contains numerous illustrations of the instruments required, the manner of using them, and the various sutures and bandages which may be needful after an operation. As might be expected, Mr. Fleming protests against the performance of operations on animals in compliance with a mere fashion, such as "docking" or "knicking" of a horse's tail, cropping dogs' ears, or cutting their tails. "These operations, which, after all, are only fashionable mutilations of perfect animals devised by a morbidly artificial and corrupt taste, should be suppressed, if not by law, at least by the influence of the surgeon." The objection of course does not hold good when the operation is performed for the cure of disease or injury, or removal of deformity. The volume is in every way worthy of the author's reputation and high standing in his profession, and cannot fail to prove instructive; it should be in the hands of every young veterinarian, and would doubtless be found very useful for reference in the library of men of more advanced standing. We regret to add that it has the serious defect of having no table of contents and no index; both of which, with a list of the illustrations, would greatly enhance its value, and will, we trust, be added to the next edition.

A Treatise on Diseases of the Ear. By CHARLES H. BURNETT, A.M., M.D., Professor of Otology, Philadelphia. Second Edition, revised and rewritten. London: J. and A. Churchill.—We note with pleasure the appearance of a second edition of this valuable work. When it first came out—now some seven years ago—it was accepted by the profession as one of the few standard works on modern aural surgery in the English language; and in his second edition Dr. Burnett has fully maintained his reputation, for the book is replete with valuable information and suggestion. The revision has been carefully carried out, and much new matter added, more especially in the chapters on the abnormalities of the auricle, otomycosis, the treatment of chronic otorrhœa, the classification of aural polypi, and the diagnosis, etiology, and treatment of aural vertigo. The account of otomycosis is peculiarly interesting to the English otologist, as Dr. Burnett has had the opportunity of seeing a great deal of this affection, which in England is so rarely met with. The observations on the dry treatment of chronic otorrhœa by means of powdered boracic acid, &c., are most valuable, and will, no doubt, meet with very general acquiescence; but we note with some surprise that no special reference is made to the important help afforded by alcohol in the treatment of chronic otorrhœa and polypi; while, as regards the classification of aural polypi, we doubt whether Dr. Burnett's views will be generally accepted by pathologists. The author's remarks, too, on the value of removal of enlarged tonsils in the treatment of ear disease

point to a somewhat different experience from that of most surgeons. Dr. Burnett's work must be regarded as a very valuable contribution to aural surgery, not only on account of its comprehensiveness, but because it contains the results of the careful personal observation and experience of this eminent aural surgeon.

Brain; a Journal of Neurology. Part XXVIII. January, 1885. London: Macmillan and Co.—This number contains a very elaborate article (translated by Dr. de Watteville), by Professor Lichtheim of Berne, upon Aphasia, of which he distinguishes no fewer than seven types based upon clinical observation and theoretical considerations of the different paths of transmission of impressions and impulses to and from the speech centre. The essay is a most valuable contribution to a complex and difficult subject. The only other original article is one by Mr. A. Robinson, of Owens College, on the Nervous Lesions produced by Lead Poisoning, in which he describes a case observed by himself where no change at all was found either in the cord or the musculo-spiral nerve. At the same time, from a review of recorded observations, he thinks that the balance of evidence is in favour of a primary peripheral neuritis, the nerve centres being also attacked by the poison both directly and indirectly through arterial degeneration. The clinical cases are of much interest—viz., one of a rare condition, having some resemblance to hystero-epilepsy, related by Dr. Hughes Bennett; one of multiple tubercular tumours involving the crus cerebri and roots of the lower cervical and first dorsal nerves, by Dr. Ross; and one of injury to the right side of the head followed by complete paralysis of the right arm (very limited laceration of the left ascending frontal convolution), by Dr. Thomson of Oldham. A "Critical Digest" of the subject of Vertigo, by Dr. George Parker, and the usual reviews of books and an extensive series of abstracts, make up a most interesting number.

The Quarterly Journal of Microscopical Science. Edited by Professors LANKESTER, THISELTON DYER, KLEIN, MOSELEY, and ADAM SEDGWICK. January, 1885. London: J. and A. Churchill.—This number contains the following memoirs:—1. J. T. Cunningham: The Significance of Kupffer's Vesicle, with remarks on other questions of Vertebrate Morphology. 2. W. H. Caldwell: Blastospore, Mesoderm, and Metameric Segmentation. 3. G. Brook: On the Origin of the Hypoblast in Pelagic Teleostean Ova. 4. H. N. Moseley: On the Presence of Eyes in the Shells of certain Chitonidæ, and on the Structure of those Organs. 5. Ray-Lankester: Archerina Boltoni, *nov. gen. et sp.*, a Chlorophyllogenous Protozoon allied to Vampyrella. 6. F. O. Bower: On the Apex of the Root in Osmunda and Todea. 7. E. v. Beneden's Researches on the Maturation and Fecundation of the Ovum. 8. W. F. R. Weldon: On the Suprarenal Bodies of Vertebrata. 9. C. B. Plowright: On the Life-History of certain British Heteroecismal Uredines (the Ranunculi accidia and Puccinia schoeleriana. 10. W. D. Halliburton: On the Occurrence of Chitin as a constituent of the Cartilages of Limulus and Sepia. There is also a correction of an error as to the morphology of Welwitschia mirabilis by F. O. Bower. There are no less than twelve plates.

The Medical Chronicle, Feb., 1885.—The original articles of this number are:—Paraldehyde, by J. Leech, M.D.; a case of Bell's Paralysis and Epilepsy of Syphilitic Origin, by James Ross, M.D.; Peptones and their Detection in Urine, by William Thomson, F.R.S. The most reliable test in Mr. Thomson's opinion is that given by Hoffmeister. The urine is first boiled with a few drops of a solution of acetate of lead; any precipitate which forms is filtered off, and to the clear filtrate one-fifth of its volume of acetic acid is added, and then a small quantity of a solution of sodium phospho-tungstate is added previously made acid with acetic acid. Any cloudiness or precipitate indicates the presence of peptone. The so-called biuret test may afterwards be applied by freeing the peptones from the phospho-tungstate precipitate.

THE PARKES MUSEUM.

AN important meeting under the presidency of the Lord Mayor was held at the Mansion House on the 13th instant, with the object of securing a larger amount of support for the Museum and of putting it on a more secure basis. The Duke of Cambridge, Earl Fortescue, Lord Mount Temple, Sir R. Rawlinson, Dr. Russell Reynolds, and Dr. Crawford, Director-General of the Medical Staff of the Army, were among those present. Letters of regret were received from many distinguished persons who were unable to attend. After the Lord Mayor had made a few remarks expressing sympathy with the object of the Museum, Capt. Douglas Galton, the secretary, read a statement giving a brief history of the institution, and explaining how, from want of room in University College, it had been transferred to its present situation in Margaret-street, where it was publicly opened by the late Duke of Albany in 1883. It is now open free part of each day. Many courses of lectures and demonstrations have been given to different classes of persons—artisans, members of building societies, the Royal Engineers, medical students, and others. There is also a valuable library, part of which was presented by the Council of the International Health Exhibition. Funds are urgently needed.

The Duke of Cambridge said that he was glad to be present, for as head of the army he felt very deeply everything that affected its welfare. Professor Parkes had done a great deal for the army during the time he was at Netley. Hygiene was more or less of a new science, and therefore it was most important that it should be studied in all its bearings, as every class in the community must necessarily be affected by the way it is carried out. The present undertaking could not be successfully continued without considerable means.

Mr. Erichsen and others having addressed the meeting, subscriptions to the amount of £1000 were promised.

THE NEW SCOTTISH CONJOINT EXAMINATIONS.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me space for a few words in reply to "M.D., F.R.C.S., Edin.'s" charge of laxity against the United Scottish Corporations, whose letter is published in your issue of the 7th inst. As a student who passed the first professional in January last under the new scheme, I say that the statement that "cribbing" goes on "wholesale" is, so far as I saw, absolutely devoid of truth. Candidates do not sit where they like. On their entrance they are met by two gentlemen, who allot to each candidate the seat he shall occupy. He does not, then, sit next whom he chooses. The room is thickly carpeted, three examiners are constantly moving about, and the candidates are seated at least one yard apart. Is "cribbing" easy under these conditions? With regard to easiness of the examination *per se*, it was more severe than I expected, and the figures, as many rejections as passes, or thereabout, would not make it appear so easy as "M.D." suggests. Your correspondent seems to forget that for this diploma the candidate has three examinations, and that this one is intended for students at the end of their first year. May I state the work required for it? Well, the candidate must be well up in inorganic chemistry, and must have a good knowledge of alcohols, fats, and sugars; in anatomy he must (at least the candidates I knew did) know the greater part of "Gray," except the viscera and nervous system; and in histology he was called upon to recognise six or eight specimens under the microscope, and say what he saw and where found in the body. To the best of my knowledge the examination was fairly and impartially carried out. In conclusion, I have only to add that such a charge by one who does not publish his name against a number of gentlemen of position would be beneath notice but for the publicity your influential and widely circulated journal gives it.

I am, Sir, yours obediently,

February, 1885. T. SYDNEY DAVIS.

*** We have another letter in the same sense from another successful candidate giving his name, but we cannot afford space for both.—ED. L.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 21, 1885.

IT is said that the Government intend to reintroduce their Medical Bill, and that it is to be reintroduced it in its entirety—that is to say, in the form in which it came down from the House of Lords, and was read a second time in the House of Commons. We heartily commend the Government for this intention, if it implies a real determination to adhere to their Bill, and especially to its main provisions. We cannot, of course, after our long and painful experience of the apparent powerlessness of Parliament as now regulated, even when led by the most powerful Ministers, be sanguine that these intentions will ever be realised. The state of public affairs at the present moment makes us less sanguine still. On the other hand, this is just one of the measures that should excite no party feeling. It has been so long before the House as, by its unsettlement, to constitute a veritable opprobrium of the Legislature, the removal of which every member of Parliament has an interest in bringing about. We, however, shall be under no delusion, nor shall we be a party to bringing our readers under any delusive hopes. There is one settlement of the case against which, by anticipation, we enter our strongest protest—that is, the settlement by concession to Sir LYON PLAYFAIR. The acceptance of his resolution we shall consider a surrender on the part of the Government and of Mr. MUNDELLA, who, to do him justice, deserves credit for the pains he has taken to settle this vexed question. It will be remembered well how deeply Sir LYON PLAYFAIR misrepresented the profession last year. One of the most grievous misrepresentations was in the statement that the annual waste of the profession was 1600, whereas the Registrar of the Medical Council is, with infinite pains to ascertain all deaths, unable to obtain evidence of more than 926 deaths of registered medical men annually. Sir LYON PLAYFAIR actually conjured up to the House fears of a state of things in which the community would be inadequately supplied with medical men. The fallacy of such a suggestion is apparent from the fact that the additions to the Register amount annually to 1176, or more than twice the number of deaths; and from the obvious indications almost everywhere of superfluity of medical men, in the form often of unseemly competition for practice and undignified methods of trying to procure it. Sir LYON PLAYFAIR's argument was cruel to the public as well as to the overfilled profession. Its meaning as regards the public was to reconcile Parliament to low standards of examination, to keep up the numbers, which, as we have shown, are only too well kept up with the present standards of examination. Mr. MUNDELLA is not an advocate for low work in Board Schools. He will act very inconsistently if he concedes low examinations in Medicine, in the efficiency of which the public have life and death interests. Sir LYON PLAYFAIR founded on this and other equally infirm grounds his amendment, which was to the effect that, instead of all entrants of the profession having to pass a Conjoint Board of Examination in certain practical subjects, those holding qualifications from certain bodies or certain combined bodies might be exempted on the condition that the Medical Council was satisfied with the final examinations of such bodies, and that in such examinations a certain number of the examiners should be appointed by the Medical Board of the division. Under the Bill, as it stands, all the medical authorities will combine to form a Board for the final examination of students, whatever their diplomas or degrees. Under Sir LYON PLAYFAIR's plan there would be endless disputes to evade the conjoint test and a demand for extra examiners, which must add greatly to the already large expenses of examinations, and there would be endless dissatisfaction and jealousy between the bodies whose final examinations are accepted and those whose examinations are not considered satisfactory. The Government know well, at any rate Sir LYON PLAYFAIR does, that the profession has been for many years bent on the attainment of a one-portal system in which all the bodies should co-operate, and that it will be a grievous disappointment if it is lost. Sir LYON PLAYFAIR has led the House to imagine that mere conjunction of corporations is all that is wanted. He must know that this is no guarantee of efficiency while there is so much competition in the diplomatisation of medical students. Our correspondence columns have shown that under boasted conjoint arrangements great scandals still are believed to occur.

The Universities of Scotland will do well to return to their former faithfulness to the Bill of the Government. They may well begin to doubt whether they have done themselves any good by raising petty objections to a great measure on which the profession has set its mind. Sir LYON PLAYFAIR will have a chance of repentance for all the obstacles which he has thrown in the way of a settlement of this question. The Irish members may, if they like, again load the notice paper with multitudinous amendments, intelligible only on the supposition of obstruction; but there is a fine opportunity of showing that they are capable of business. We are, we repeat, under no delusive hope; but it cannot be the interest of any section of the House that respects the reputation of Parliament to allow another session to close without passing the Bill of the Government.

IN medicine there is an ever-present necessity to reconsider established beliefs and doctrines in the light of new facts, and many apparently simple conditions have been thus found to be dependent upon a number of factors which had not before been taken into the reckoning. One of the most recent instances of an attempt at such reconsideration is to be found in an essay by M. CHAUFFARD on Catarrhal Jaundice (*Revue de Méd.*, Jan. 1885), in which he advances some weighty arguments against the truth of the universally accepted doctrine of the dependence of the condition upon an extension of inflammatory changes from the gastro-duodenal membrane. His reflections are suggested by two cases of jaundice, both in habitual alcoholics, and both for some time giving rise to anxiety from the constitutional disturbance that accompanied the icterus. He points out the rarity of jaundice as a result of chronic gastric catarrh

and very pertinently remarks that instances of a spreading inflammation arising from a simple local inflammation are extremely rare. How, he asks, is the fact that attacks of jaundice occur epidemically, under some seasonal influence, to be reconciled with the notion that they are due to an inflammation spreading from the duodenum to the bile-duct? The mode of onset of such cases is often unlike that of a primary gastric catarrh; for in the two instances quoted, an exposure to cold succeeding a drinking bout was followed by a sense of weakness, muscular pains, anorexia, and vomiting; during the next few days pyrexia and a bilious diarrhœa supervened, showing that before any obstruction of the duct occurred the liver had been excited to over-activity; and it was not till the end of a week that jaundice appeared. In such a case everything points clinically to a primary irritation of the biliary gland and a secondary catarrh of its excretory ducts.

M. CHAUFFARD next turns to the renal secretion to ascertain whether an examination of the urine will afford any support to the theory he favours; and in both his cases he found that between the sixth and tenth or eleventh days the quantity of urine and of urea increased daily to a considerable degree; the former from one-half to five litres, and the urea from seven to thirty-five grammes. From this maximum point these amounts fell with oscillations to the normal. In one of the cases albuminuria was present up to the tenth day. In fact, he says the patient had then a "urinary crisis" analogous to that which accompanies the decline of an acute general disease. At first, in the invasion period, the secretion was greatly diminished, then later the occurrence of a critical diuresis denoted the entrance on convalescence. But for a long time after this the patient remained jaundiced, wasted, and enfeebled.

From such considerations it appears highly probable that in most, if not in all, cases of catarrhal jaundice, the condition is not a purely local one arising from local derangements, but a general disease running a regular cyclic course and having jaundice as one of its later symptoms. If this be so, what is its etiology? Is it to be placed among infective diseases, or is it not more likely due to an intoxication? The last-named process can be explained by reference to the ptomaines, which, formed in the digestive canal, are normally taken up by the blood and eliminated by the urine. Supposing that through derangement of normal processes they be formed in excessive amount or be eliminated ineffectually, or their noxious properties increased by the presence of alkaloids foreign to the ordinary intestinal fermentations, there would ensue a condition of auto-toxæmia, which may have but slight and transient effects, or more serious and rapidly fatal results. By such a hypothesis catarrhal jaundice would form the lowest of a series of pathogenic processes, of which malignant icterus would be the most severe and highest. It would, moreover, be supported by such considerations as result from SCHIFF'S experiments, which go to show that the liver itself exerts a destructive power upon the toxic alkaloids absorbed from the intestine into the portal blood. When, however, owing to the increase in their amount or in their virulence, from interference with the normal digestive fermentations, the liver, unduly irritated by their presence, is unable to exert its neutralising influence, the poison is diffused throughout the system. Hence the hepatic and the general symptoms, with, as a direct result of the liver irritation, the eventual supervention of biliary catarrh and jaundice. There may, of course, be predisposing conditions which render the liver less able to contend against the influx of an excess of these toxic alkaloids; and such conditions may perhaps be found in seasonal influences, in malarial cachexia, and the like.

We have kept somewhat closely to the tenour of M. CHAUFFARD'S line of argument, which certainly has the merit of being an endeavour to harmonise clinical facts with the advances made in physiology. Many must have felt that the doctrine of gastro-duodenal catarrh was unsatisfactory in view of the comparatively small proportion of cases of this common malady which are associated with icterus. And yet without further clinical observations we would hesitate to accept the new teaching; and it may be hoped that the attention drawn to the subject by M. CHAUFFARD will result in a series of clinical observations of an affection upon which little serious or profound study has hitherto been expended.

As time goes by, one after another of the impediments barring the progress of the scheme which seeks the general and unrestrained admission of women to the various branches of medical education is being removed. It is needless to point out that the goal of ambition sought by the gentler sex is not the mere acquirement of professional knowledge for its own sake, but the practical outcome of successful study in the shape of legal qualifications and licence to practise the healing art. The tide of revolution has set in very strongly, but not so strongly, it is to be hoped, but that it may yet be stemmed by the emphatic protest of a large majority of the profession, including most of its distinguished masters. The abstract doctrine of "equal rights" has been made the theme for socialistic clamour, and the ground for arguments utterly illogical. Quite recently an important institution has surrendered, unconditionally in fact, though at discretion in form. We refer to the Royal College of Surgeons in Ireland, which has, unsolicited, thrown open its doors to female candidates for their diploma. Seeing that this corporation directs the affiliated School of Surgery, it is clear that nothing is now wanting to ensure in the sister isle all that has been asked directly or indirectly of British licensing bodies. The London University has the names of several lady graduates in medicine already on its calendar, and one at least of these has taken the degree of Bachelor of Surgery. But it is at the colleges that new recruits will muster in force, for the examinations of the London University are too difficult to offer an incentive to more than a very small minority of lady aspirants.

Although the admission of women to examinations in medicine is an accomplished fact, we do not hesitate to question the wisdom of the concession. With regard to surgery the objection is infinitely stronger. A woman may be the fitting instrument to treat the ailments incidental to her sex, and in her place by the bedside of a sickly child; but we doubt the propriety and policy of committing to her care grave surgical diseases and accidents. It is not so much the quick

discernment, the prompt arrival at a conclusion, or the highly nervous and sensitive mind that are required of a surgeon, but rather the patient determination to overcome difficulty, the calmness in face of calamity, combined with strength of will; and these latter are the qualities least developed in women, who in our opinion are neither physically nor mentally constituted to solve such problems as a surgical diploma will give them a legal right to attempt.

It is on these grounds that we contemplate the recent action of the Irish College with misgiving and regret, believing as we do that neither humanity, nor the profession, nor even the parties most interested, will gain by the franchise lately bestowed. The whole subject of female medical education and qualification touches so closely on social and domestic grounds, that no step subversive of long-established usage and acknowledged utility should be taken without the fullest consideration. A stronger claim must be made before the Colleges of England and Scotland will be justified in granting what the Council of the Royal College of Surgeons of Ireland has recently conferred.

FROM time to time the obituary notices in the daily journals place on brief record the death of a public school boy. There is a passing consternation among his school companions, and some real grief in the house at which he was a boarder. But it is a wise provision in the nature of the young that sorrow should be more or less transitory. The necessary feature in our public school system that such sad events should interfere as little as possible, if at all, with the routine of school duties tends to make these sorrows of school life more ephemeral than they otherwise would be, and we think it is good that it should be so within becoming limits. This, however, does not do away with the weighty responsibility resting on the house master in the first instance, and on the governing authority of the school in the second, of carefully sifting all the evidence that can throw light on the probable or possible origin of such diseases as lead to a fatal issue in a previously healthy school-boy. There is generally more or less of mystery about such illnesses, and often an under-current of suspicion that had they been detected earlier their fatal issue might have been averted. The overpowering grief of parents and friends is too great to admit of their initiating any inquiry, which at best could afford them but little hope of comfort. The masters and governing authority naturally prefer the event to pass over with as little publicity as possible. Disease and death at a public school are equivalent to ill repute and lessened popularity, and these in due course tend to lower the number of pupils and reduce income. A full and impartial inquiry can, therefore, scarcely be looked for from within the school itself. What, then, ought to be done to give to the public school boy a full measure of protection to health and life? We hold that something in the nature of a public inquiry should be made whenever death takes place at one of these schools; not with a view of incriminating anyone, but as a measure of precaution for the future. Often much light could be thrown on such events by the medical attendant to the school; but his hands are tied and his mouth closed by the fact that his very position, and often his daily bread, are at the mercy of his employers, the masters and governors. And, further, no inquiry could take place which would not impose on the school attendant the responsibility of clearing up any suspicion of insufficient protection to the health and life of the boys under his medical charge. Yet it may be out of his power to remedy these defects. Who is responsible as guardian of the school-boy's health? On the medical attendant of a public school there is a responsibility at present insufficiently realised—a responsibility not confined to the house master or governing authority, but to the public at large. He should be no party to secrecy as to the primary cause of death in any particular case, whatever phase the secondary or immediate cause may have taken. If the primary cause can be traced to any defects in the school, or if even a suspicion exists that such cause may have had its origin in some error of discipline or too severely imposed duty when health was not at its best, outspoken candour ought not to militate against the medical attendant's interest. Nor can those called in consultation free themselves from the responsibility imposed upon them of absolute candour in such cases. To evade the duty of speaking plainly as to the primary cause of death by filling in a certificate of the secondary cause simply to avoid what is disagreeable is shirking one of the highest missions of the profession, and degrading a noble calling to worldly interests.

Annotations.

"Ne quid nimis."

THE UNIVERSITY OF LONDON.

IN compliance with a requisition, signed by members of the undermentioned committee, a special meeting of Convocation has been convened for Tuesday next, the 24th inst., to receive and consider the report of the special committee appointed on Jan. 6th, "To consider the proposals lately published by the Association for Promoting the Establishment of a Teaching University for London." The report of this committee will be presented by Mr. James Anstie, Q.C., B.A., and Dr. P. H. Pye-Smith; and the following resolutions embodied in it will be moved by Lord Justice Fry, B.A., and seconded by Sir Joseph Lister, Bart., M.B.: 1. "That, in the opinion of Convocation, the objects of the Association for Promoting a Teaching University for London would, if carried into effect by this University, add to its usefulness and importance. 2. "That Convocation now reappoints the special committee appointed on Jan. 6th, 1885, to promote the carrying into effect by this University of the objects of the said Association, with power to confer with the Senate or any committee thereof, and with the said Association, and with such other bodies as they may think fit, and with power to accept resignations, fill up vacancies, and add to their number, and also to appoint subcommittees; and that the said committee be directed to report to Convocation from time to time as occasion may require."

MEDICAL AND ENGINEERING INSPECTORS AT THE LOCAL GOVERNMENT BOARD.

UNDER the recent Treasury sanction six medical inspectors are now engaged in doing certain temporary work for the Local Government Board. Two of them, Dr. De Chaumont, F.R.S., and Dr. Davies, jun., of Bristol, have either last year or during the early part of this year

already been occupied in inspections of the ports and coast-line districts, and they will, it appears, continue to carry out this important portion of the work of cholera prevention which is being undertaken under the guidance of the Board's chief medical officer. The other four appointments appear to be of a more temporary type, for the inspectors have not yet been assigned to the inland districts which have to be inspected in connexion with the possibility of cholera importation and spread. Thus, Mr. Arnold Royle, C.B., Mr. Sweeting, of the Metropolitan Asylums Board's Western Hospital, Dr. Simpson, well known in connexion with his investigations of cholera at Damietta in 1883, and Dr. Grosswell, who holds an appointment on the staff of St. Bartholomew's Hospital, either have been or are still engaged in making certain special inspections as to out-breaks of infectious disease and other matters. But, for the moment at least, the increased medical staff has been completed. In the engineering department new inspectors have been appointed, owing to a death-vacancy and to temporary pressure consequent on the permanent staff being engaged on special work. General C. P. Carey, R.E., and Major-General A. De Courcy Scott, R.E., are the two inspectors who have been selected.

CHEMICAL LABORATORY AT CAMBRIDGE.

ALL who are acquainted with the scientific teaching department of the University of Cambridge are well aware that a new chemical laboratory is urgently needed, the present building being quite inadequate for the proper accommodation of the increased number of students, and for the carrying out of experimental researches by the professors and others engaged in such work. A syndicate to consider the matter was appointed some time since. Professor Liveing and Mr. Trotter have visited several of the new Continental laboratories, and under their supervision plans for a new laboratory, with lecture-rooms, rooms for scientific investigation, &c., have been carefully prepared by Mr. L. J. Stevenson, the architect, who has carried out their instructions in a way which appears to the syndicate to be highly satisfactory. The estimated cost is £30,000, and the difficulty is how this sum is to be raised. The prevalent idea of the wealth of the University is unfortunately a very mistaken one. Even with the additions lately derived from colleges—which, by the way, in the present state of agricultural depression can barely afford the tax laid upon them—the income of the University is scarcely equal to meet the annual demands for the maintenance of buildings and the teaching and other staffs of officers. The only way in which the funds can be raised for this and other similar much-needed purposes is by borrowing, which of course is objected to by many persons for obvious reasons. Mr. Stevenson's plan, however, is now before the senate, and was the subject of discussion in the Arts Schools on Saturday. Professor Liveing stated fully the necessities of the case, the insufficiency of the present provisions for teaching, for study, and for research, his belief that the proposed building would do no more than meet the requirements, and he thought it would well answer the purpose of the University to borrow the money required for the erection of the building. He pointed out that the site of the present chemical building is urgently required for the extension of the medical school and the proper accommodation of the increasing number of medical students. The proposal was, on the whole, not unfavourably received. Professor Humphry hoped that means would be found to overcome the financial difficulties and carry out the plan. The existing chemical laboratory was ill-fitted and quite insufficient for its purpose, not affording room for the students or opportunities for the professors, who were obliged to go elsewhere to carry on their researches. With all regard for literary, historical, and other subjects of instruction and education pursued in the University, they could not but perceive that science had now come to the front as an educational basis. The furthering it was, moreover, of the utmost importance to the national prosperity, and the instruction in it was greatly calculated to promote the interests of the students as well as to give them good mental training. Of all branches of science chemistry was perhaps the most important, the knowledge of it being essential to an apprehension of the laws governing the animate and inanimate world. He could not but hope that this discussion, revealing the financial position of the University, and the difficulty found in providing the money for this and other buildings required for the proper conduct of education, would convince the public that there are no unemployed or ill-employed accumulations of wealth in Cambridge; that all, and more than all, the funds at the disposal of the University were needed for the carrying on the proper work of the place. Unfortunately, Cambridge laboured under the double disadvantage of being poor and of being supposed to be rich. He trusted that the fact was being, or would soon be, realised, as the inner life of the University came to be better known, that in no place in the kingdom was more serious, continued, hard work being done by a large number of highly educated men with so small an amount of pecuniary remuneration than is the case in Cambridge, and moreover that the work is done well and heartily, all that was required being better buildings and better apparatus.

TANNIC ACID INJECTIONS IN CHOLERA.

DURING the recent exceptionally severe epidemic of cholera at Naples, Professor Cantani proposed combating the premonitory diarrhœa by warm tannic acid enemata. The practice was largely and successfully adopted. Dr. Vincenzo Vitone has just published, in *Il Morgagni* for last month, his results with that method of treatment at the Cholera Orphanage at S. Antonio a Tarsia. The children admitted in this institution came from the most infected parts of the city, and had lost one or both parents from cholera. Three illustrative cases may be quoted from a large number in which cholera was promptly arrested by tannic acid clysters. S. B——, aged eight, was conveyed to the Orphanage on Sept. 18th, from the house in which both his parents had died from cholera. He had enjoyed perfect health up to the time when, from no appreciable cause, he was seized with vomiting and diarrhœa. In a few hours he had ten evacuations, the last perfectly colourless. The patient complained of intense thirst and pain over the region of the stomach; the face was slightly cyanotic; temperature 36° C.; pulse scarcely perceptible. The following solution was injected per rectum: Warm water, 1000 grammes (1 gramme is equal to 15·432 grains); tannic acid, 3 grammes; gum arabic, 20 grammes; and laudanum, 12 drops. An infusion of chamomile was at the same time administered. After the lapse of an hour the boy was more wakeful, and the pulse became perceptible; the alvine discharges ceased, and in two days the patient left his bed completely cured. P. T——, aged four years, had lost her mother from cholera, and was conveyed to the Orphanage on October 10th. She was rapidly reduced by rice-coloured stools, so as to be scarcely recognisable. At 3 P.M. the temperature was 36·1° C., and the pulse almost imperceptible. The following clyster was administered: Warm water, 400 grammes; tannic acid, 2 grammes; gum arabic, 15 grammes; laudanum, 5 drops. The diarrhœa was suddenly arrested. At midnight the child was wakeful, hungry, and partook of milk. In two days she left her bed perfectly cured. A. R——, aged three, lost his mother from cholera, and was suddenly seized with vomiting and diarrhœa. The face became cyanotic, and the

extremities cold. The temperature of the body was 35·1° C.; the pulse was scarcely perceptible. A warm tannic acid clyster, according to the formula in the preceding case, was administered at once, an infusion of chamomile was given by the mouth, and the limbs were wrapped in warm woollen cloths. In the course of two hours the diarrhœa had ceased, and marked reaction set in; the temperature was 38·8° C., and the pulse 80. The following day the fever continued and the bowels acted, but the motion was well formed. The fever continued two days longer, but then subsided, leaving the child perfectly well. In adults Dr. E. Villani has injected per rectum as much as fifteen grammes of tannic acid in two litres of warm water, with invariably good result. The *modus operandi* of the treatment is attributed by Professor Cantani to the astringent power of tannic acid, and to its sterilising the comma bacilli, which need an alkaline solution for their development. Without entering into this therapeutical disquisition, the clinical results appear to afford striking evidence of the efficacy of warm tannic acid clysters in the treatment of cholera.

THE EXHAUSTION OF ENGLISH COAL.

A PAPER by Mr. Sydney Lupton, in a recent number of *Nature*, furnishes food for thought to every patriotic Englishman, for it shows by reasoning, which, at any rate, deserves the most careful consideration, that our coal-supply cannot long preserve our insular supremacy. Nearly a century has passed since the subject was first mooted by John Williams; but general attention was not aroused until 1881, when Mr. Hull, shortly followed by Professor Stanley Jevons, proved that the supply was by no means inexhaustible, the latter inquirer asserting that "rather more than a century of our present progress would exhaust our mines to the depth of 4000 feet," below which, it is believed, they would be unworkable, even if any important quantity of coal remained. A Royal Commission was appointed, which, in 1871, reported that 146,480,000,000 tons of coal remained available. This estimate is now regarded as considerably too high. Moreover, the deepest pit in England is less than 3000 feet deep, and although there is a pit in Belgium, the Lambert, that goes down to 3490 feet, such a pit could not be worked in England at anything like the present prices. Taking the figures of the Royal Commission, Mr. Lupton assumes as the present available supply 144,700 million tons. He takes one million tons as the unit, pointing out that it is equal to a cubical block 100 yards each way, or a square mile one foot thick. Dealing with this gigantic unit, Mr. Lupton proceeds to calculate from Mr. Robert Hunt's "Mineral Statistics" and other data, the past, present, and future output of coal. Following his example we will use the million-ton unit, but, for the sake of simplicity, will omit fractions. In 1854 we "won," that is, excavated, 65 units and exported 3. In 1883 we won 164 and exported 23. The total output for the last thirty years therefore increased on the average about 3 units per year, while the export during the whole period increased sevenfold. Illustrations are required to convey to the mind any idea of this enormous consumption, and we cannot do better than quote those supplied by Mr. Lupton. "It was calculated by Sir Henry Bessemer that the output of coal, 154,000,000 of tons for the single year 1881, would suffice to build fifty-five great pyramids, or to rebuild the great wall of China, and to add a quarter to its length! In 1883 the output was 163,800,000 tons, which would form a column a mile square and nearly 164 feet high; or would build a wall from London to Edinburgh 400 miles long and 45 feet 9 inches high and thick; or around the world 24,000 miles long and 5 feet 11 inches high and thick; or if the Straits of Dover are 21 miles across and 600 feet deep, would make an embankment across them 22 yards wide; while the total output for the thirty years would build a round column 9 feet 4 inches in diameter which would reach 240,000 miles high, the distance of the moon." If the output of coal continues to increase at the rate of 3,000,000 tons annually, the supply will last for 261 years; but Mr. Lupton, who has analysed the figures with care, concludes that practical exhaustion would occur in about 106 years, a period which agrees with that assigned by Professor Stanley Jevons. Space forbids us to follow the writer through his careful study of possible means for the diminution of this prodigal consumption. It is enough to say that the outlook does not seem hopeful. As to the notion of obtaining our future supply from the inexhaustible fields of America, that seems dispelled, as far as large manufactures go; by the calculation for our present supply 2100 steamers, each carrying 6000 tons, and each making thirteen trips a year, would be required, and if the price, free on board, were ten shillings a ton, "we should have annually to pay America £81,900,000, an amount not far below our present national income." The question is one which should be considered by every statesman, for those who talk so loudly about England's honour and England's place among nations, cannot be indifferent to the great decadence which would necessarily attend the exhaustion of our coal-supply. We may, indeed, ask ourselves whether, under existing conditions, the export of coal, at any rate to foreign countries, should be allowed.

A CONFERENCE ON CHOLERA.

A CONFERENCE of representatives of the principal countries of Europe will shortly be held, at the invitation of the Italian Government, in Rome, for the purpose of discussing the steps which it is advisable to take in the event of an outbreak of cholera occurring. We understand, although no definite arrangement has yet been arrived at, that England will be represented by Sir W. G. Hunter, K.C.M.G., and Dr. Thorne Thorne, of the Medical Department of the Local Government Board. Should the rumour regarding the appointment of English representatives be confirmed, we congratulate the Government upon the choice it has made, feeling sure that the opinion of the medical profession and sanitarians of this country will be fully and clearly enunciated, although we can perhaps hardly hope for many, if any, new precautions to be adopted in the event of a cholera epidemic.

WHAT WAS THE CAUSE OF DEATH?

AT an inquest held by Mr. Aspinall, the coroner for Liverpool, on January 6th, and subsequently at the assizes, the medical testimony on behalf of the Crown and the defence was singularly conflicting. It appears from the evidence that on New Year's Eve a Norwegian sailor named Johnson was engaged in a violent altercation with the three men charged with having caused his death. The question the jury had to decide was whether the deceased came to his end through the maltreatment of the prisoners or died from natural causes. Different statements were made on the two sides as to who was the aggressor, but with that we are not concerned. The case for the prosecution was that deceased had been beaten on the head with a belt and otherwise assaulted. Death followed almost immediately. The coroner's jury returned a verdict of "Wilful murder"; at the trial the accused were convicted of manslaughter. We wish to draw attention to the inconsistencies between the statements of the medical witnesses. Mr. F. Knight, house-surgeon to the Royal Southern Hospital, deposed to finding some cuts and bruises about the head and face—injuries not dangerous in themselves—and slight congestion of all the organs, the state of which in his opinion was quite

compatible with health. He gave the probable cause of death as concussion of the brain. The condition of the organs, said Mr. Knight, gave no indication of alcoholic excess. Dr. W. Whitford, called for the defence, took exception to these views. According to him, the aorta was the seat of extensive long-standing disease, the left lung almost completely solid, the right extensively solid, and the brain congested; the heart showed old-standing disease. These pathological changes, Dr. Whitford alleged, might be attributable to heavy drinking. In a case of such gravity it is to be regretted that the medical men were not agreed upon what was certain and what probable. Was the congestion of the lungs merely indicative of the mode of dying, or was it too extensive and general, as Dr. Whitford stated in cross-examination, not to have been of post-mortem origin? Had pneumonic exudation supervened on congestion? Was the cardio-aortic degeneration beyond the extent usually incidental to age? Did the alleged injuries accelerate death? These were the questions suggested by the case as a basis for investigation. We have not the slightest doubt that, whatever may have been the *predisposing* causes, the *immediate* cause of death was shock either from concussion of the brain or from the great excitement consequent on the struggle. Antecedent disease and alcoholic excess would render a man likely to succumb to injuries which under normal conditions would be insignificant.

THE OPEN SPACE QUESTION.

IT is very gratifying to us to note the success of the admirable efforts of Mr. H. R. Williams to preserve the Highgate Woods, as woods, for the use of the people of this congested metropolis. We regard the provision of open spaces in the present circumstances of the metropolis as not only a public question, but as in the first rank of public questions to which our public men should give their attention and sympathy. Not only should many existing spaces be secured in perpetuity for the delight and refreshment of the people, but steps should be taken to create more of them in some districts where they are most needed. It is difficult, however, for the most beneficent public authorities to create woods and sylvan beauty. The more credit to them when they cheerfully give those which exist, and which might have been sold for baser purposes. We give the Ecclesiastical Commissioners great credit for their generous action in this matter, and will be glad to learn that they have even determined to go further, and give the Churchyard Bottom Wood as they have given the Gravel Pit Wood. The suggestion that this should be purchased by some individual at once wealthy and generous is very good, but such individuals do not always rise to the occasion, and the needs of the millions of this city should not be dependent on personal generosity. The Ecclesiastical Commissioners would make good use of their powers by preserving more of the Highgate Woods for public use.

NURSING THE POOR.

WE lately remarked on the improvement in the art of nursing. It is also a point of improvement in Christian charity that it is trying to send a trained and cultivated nurse wherever there is a sick person untended. There are many associations of this kind in London now. This week one of the most successful of these, the North London Nursing Association for the Poor, has been holding its annual meeting under the presidency of Mr. Caine, M.P. It works chiefly in Holloway, Hornsey, Highbury, Ball's Pond, and the neighbourhood. The work done may be imagined from a few of the facts stated in the report. The number of cases under nursing care has been on an average 166 a month. The cases have included 95 of typhoid, 103 of rheumatism, 139 of acute bronchitis, pneumonia, and pleurisy, 43 of diphtheria, 39 of cancer, 79 of puerperal illness, &c. Nearly 200 medical men had referred patients to the Association for nursing help. Two of the nurses contracted typhoid fever, of whom one, an experienced and able nurse, died. This fact was fully and kindly investigated by so capable a sanitarian as Mr. Shirley Murphy, who acquitted the premises of blame, and considered that the disease had been caught by the nurses in the discharge of their duties. Much credit is due to the committee, and especially to the indefatigable and courteous treasurer, Mr. Butler, who is eminently the right man in the right place. The institution is creditable to the north of London, and should be generously supported.

DEATH FROM "INDIGESTION."

No doubt it is possible that the irritation set up by the presence of large masses of unmasticated food in the stomach may, in an exceptional case of weak heart, lead to the occurrence of syncope and death. Such a combination of evils has recently been found to produce a fatal result. The moral of this occurrence clearly must be to see that all food, and particularly that taken shortly before retiring to rest, is properly crushed by the teeth, and, which is not less important, well saturated with the secretion of the salivary glands, which it cannot possibly be unless the process of mastication be slowly performed. It is too commonly forgotten that the food needs not only to be finely divided, but to be well mixed with the saliva. Digestion, in fact, as we know, commences in the mouth, and this early stage of the process must be perfected by due elaboration if the later stages, which take place in the stomach and the intestines, are to be of avail as preparatory to absorption, assimilation, and nutrition. Artificial teeth are helpful in the performance of a necessary function when the natural teeth have ceased to be useful, and ought to be procured by all who stand in need of them. This is not a matter of vanity or taste, but one of personal expediency, of health, and even, it may be, of life itself.

SCARLET FEVER INFECTION.

AN instructive report has been issued by a medical committee appointed to inquire into an alleged recurrence of scarlet fever at a female orphan asylum as the result of the premature discharge of patients from the Netherfield Institution for Infectious Diseases at Liverpool. The precautions usually taken at that institution are of a very complete sort. The resident medical officer may not allow the discharge of any patients until he can certify them to be free from infection. In the case of scarlet fever it has not been found possible to adopt any time rule, but all convalescents are examined at least twice a week, and in order to facilitate desquamation they have a warm bath every other day. Before leaving fresh clothes are provided, and a final bath with disinfecting soap is gone through before these clothes are put on. In the case of the Orphan Institution, a further precaution was taken; for the managers removed the orphans to a house which had been taken for that purpose, and there the children were subjected to a further week's probation, after which another bath was resorted to, and then they returned to the asylum. Notwithstanding this, however, scarlet fever reappeared amongst the inmates after the return of some of the patients who had passed through all these tests. In the case of two children who returned six weeks and a half after the commencement of their illness, the asylum nurse found desquamation going on in the soles of the feet; and these cases are believed to have originated a fresh occurrence of the disease. The committee are inclined to think that the

cases in question were instances of secondary desquamation, such as are referred to in Quain's Dictionary of Medicine and in Ziemssen's Cyclopædia, and that this desquamation was the result of a much more active use of their feet than the children could have indulged in whilst in the hospital. On the general question, we would point out that final desquamation about the heels and soles of the feet is not uncommonly postponed to a later date even than six weeks and a half from the onset of the disease, and this quite apart from secondary desquamation; but as a rule we believe that the risk attendant on this late desquamation about those parts of the foot is not by any means great. Then, again, a failure thoroughly to cleanse the head is probably a by no means unfrequent source of retained infection, the desquamation of the scalp being at times mistaken for ordinary "scurf." A further source of danger receives still less attention. When children are sent to a scarlet fever hospital, it often happens that the clothing they wore a day or two before removal is stored away, and it is only brought again into use after their return home. This clothing is often infected. More than once we have heard of patients sent to hospital early in the week whose ordinary week-day clothing has been sent for disinfection, whereas that worn on the previous Sunday, having been put away, is again brought out after convalescence, and retains sufficient infection to lead to a recurrence of scarlet fever, with which the hospital and its alleged lack of sufficient precautions are certain to be credited.

A NEW SEPTIC ORGANISM.

AT the anniversary meeting of the Royal Microscopical Society, held last week, the President, the Rev. Dr. Dallinger, gave a lucid and exhaustive description of what is believed to be a septic organism not hitherto described. The new organism first came under notice about four years ago in an exhausted maceration of codfish, which had decomposed in a broth made from rabbits. The organism is of suboval shape, and measures $\frac{1}{10000}$ in. in length by $\frac{1}{15000}$ in. in breadth; it has no fewer than six long thread-like flagella, each of which is three times as long as the body. The mode of ordinary multiplication by fission presented features of much interest, owing to the problem of the formation of the new and numerous flagella. Multiplication appears also to take place by means of spores. A kind of fusion of two individuals was observed, the movement of the organism being continued during the fusion, but gradually slacke ing afterwards, when the body breaks up rapidly into very minute portions. The "spores" thus formed were afterwards observed to grow up into the likeness of the parent form, and shortly after to multiply by the ordinary process of fission.

LUNATICS UNDER LOCK AND KEY.

IT will, probably, be some time yet—it may be many years—before the Legislature withdraws the power of prison keeping from non-official persons. It will be still longer, we fear, before public opinion is enlightened to the extent of being able to perceive that imprisonment, whether official or otherwise, is neither an integral part of *treatment* for mental disease nor necessary for the protection of lunatics and the community. There is, however, a minor point of policy, and, as it would seem, of common humanity, which needs to be made clear, and may be not unreasonably pressed on general attention. We allude to the practice of keeping lunatics under lock and key, even when they are already safely confined within the walls of an asylum! This practice has no better excuse than the plea of economy. It costs considerably less to lock up a person of unsound mind than to provide the patient with proper attendance. This miserable—though, unhappily, all-sufficient—argument is held to be a valid one in defence and support of the practice of locking the inmates of asylums in their rooms by night, and too often by day also. Where keys are not directly turned upon the insane in "single rooms," the doors of these apartments are so constructed that they cannot be opened from within, which practically amounts to the same thing as locking the doors outside. In the event of a fire occurring, either lunatics are burnt in their prison cells, or they are released by some courageous person, perhaps the superintendent or proprietor of the asylum, at the peril or sacrifice of his life. The practice ought to be interdicted. It is a most mischievous method of "safe-keeping" at the best, and it is not one that ought to be tolerated in view of the risks necessarily entailed upon the poor folk thus treated. It will be better to be warned in time than to wait until a great catastrophe, the culminating point of a long course of mismanagement, shall compel the discontinuance of a practice obviously as dangerous as ill-advised.

CHOLERA HOSPITALS IN BOMBAY.

AN unpleasant controversy has arisen in Bombay in connexion with the subject of the establishment of cholera hospitals in the different quarters of the town. It appears that the Government have selected for the site of one of these the compound of the European General Hospital, and to it all the natives attacked with cholera in the district are to be sent. Against this selection the committee of the hospital have entered an energetic protest, and they are supported in their objections by the Surgeon-General of the Presidency, who was absent on duty when the site was chosen. His objections, as summarised in a Government general order, are "that the locating of a cholera hospital in the immediate neighbourhood of a large general hospital would be a most unwise, and indeed dangerous, procedure; unwise, inasmuch as the introduction of a disease like cholera, which the general community regard with dread and alarm, would, from the general effect produced, act to the detriment of the interests of the hospital by deterring the class of people who frequent it from attending; and dangerous, in bringing a supposed infectious disease into the immediate vicinity of convalescents, who, it is well known, are much more susceptible to infection than others in sound health; ..... that the plan proposed is in opposition to all principles hitherto laid down for the prevention of the spread of cholera." The sanitary commissioner for the Presidency does not apprehend any risk from the adoption of the site, believing, as he does, that it is clearly established that cholera is not contagious. The Government, adopting this view, adheres to the resolution regarding this hospital. We cannot but think that this decision is ill judged. The question of the transmissibility of the disease is still unsettled, and although we believe the opinion of its non-contagious character greatly predominates, it seems matter for regret that a course based on that view should be adopted which calls forth so strong an opposition as this has done. But apart altogether from the question of contagion, it appears to us most unadvisable—nay, most unjustifiable—to erect in the compound of the European General Hospital a cholera hospital for natives. The depressing effect upon the patients in the former of the perpetual recurrence of funerals, during the prevalence, to any extent, of cholera, can scarcely be over-estimated. The only circumstance which could justify the erection of a cholera hospital in such a locality would be the impossibility of obtaining another eligible site in the district, and this, we believe, is not the case. We trust that the Government will reconsider their decision and give weight to the very serious objections which have been brought before them. It is most unfortunate that they

should have adopted, on grounds which are open to dispute, a course which cannot fail to create strong feelings of opposition on the part of an influential class in Bombay, and which will, in all probability, curtail the benefits conferred by the European Hospital, at least during the prevalence of cholera. If no other site can be obtained in the district, the Government ought to assign this as a justifiable reason for the course they have adopted; if one can be had, then, in deference to the wishes of the committee and in the interests of humanity, they should without hesitation rescind the resolution and take steps to provide the requisite accommodation in some less objectionable situation.

PAROCHIAL MEDICAL LEGISLATION IN THE UNITED STATES.

OUR readers are well aware how deeply we sympathise with the large section of the profession in the United States who wish to place medical education and examination on a satisfactory footing, and to abate the number of diploma factories. The difficulties which have to be surmounted in a young and democratic country are very great. They have an illustration in the case of the State of Pennsylvania, where a Bill has been prepared to create a "State Board of Medical Examiners and Licensers." We confess we shall not be grieved if we hear of the failure of this attempt at legislation. It provides that the governor of the State shall appoint a board of nine examiners and licensers. He is to choose seven from a list of twenty-one names submitted by the Medical Society of the State, and two from a list of six submitted by the Homœopathic Medical Society of the State. The only qualifications of the examiners are that they shall be graduates of a legally chartered college, and shall have practised five years. But they must not be members of the faculties of any such college or university. Examiners selected from practitioners not teachers will, at any rate, not be very severe or exacting in anatomy, physiology, histology, general chemistry, &c., to say nothing of pathology, therapeutics, &c. The importation of homœopaths into the examining board is a violation of the rule of all European States. We quite approve of our own rule, which protects a candidate from rejection on the ground of his medical theories; but to give homœopaths a place in an examining board is another matter. But the parochialism of the legislation reaches its climax in Section 9, which provides that after the 1st of September, 1886, no person shall practise in Pennsylvania (be he graduate of Berlin, Paris, London, Edinburgh, or New York) who has not passed the gate presided over by these nine chosen practitioners of Pennsylvania. This is the story of the three tailors of Tooley-street with a vengeance. Such a Bill is not calculated to restore European respect for medical legislation in the State of Pennsylvania.

INTEMPERATE ADVOCACY OF TEMPERANCE.

TEMPERANCE in regard to stimulant drinks, as one of the leading social questions of our day, naturally gathers round it much variety of opinion. Written and spoken disquisitions upon it are common in every town and village, and vary in their cast, though not in their foundation of fact, according as the subject is considered from a moral, a sanitary, or a political standpoint. In truth, the more we widen the area of such considerations and give to each its due place, the sooner are we likely to arrive at a practical result in the direction of drink reform. The solution of the difficulty is not to be attained by pushing any one of the several theories of amendment to an unfair degree, but rather by consolidating into one remedial force the common and necessary points in which all agree. Our own view we may describe as a temperate and even an abstinent one. It does not at all ignore the great moral evil which has attended the ready and regular consumption of alcohol as a beverage, nor does it fail to observe and advocate what is now a cardinal doctrine in the hygiene of temperance—the uselessness for any good, and the frequent injury, which arises from the habitual use of stimulants by the sound in health who need no stimulation. But having said thus much, we have reached the limit which reason and fairness impose. The conditions of disease and allied states of physical exhaustion afford many instances in which we can alone rely, for the furtherance of nutrition or the support of flagging power at some crisis, on a stimulant, and it must also be admitted that at times the alcoholic form is preferable to any other. This view of the question is the one which has for long commended itself to the judgment of the medical profession, as well as probably to that of many others, not professionally interested, who have sought to guide their decision by the light of experimental and practical proofs. When, therefore we read of statements being made by extreme advocates of so-called temperance, to the effect that medical men prescribe stimulants in order to increase their practice—that is, to generate disease; that under no possible circumstances should alcohol be taken internally; and that an increasing general death-rate is the gauge of our retrogression into drunkenness, as was lately stated by Dr. J. H. Aldridge—we are bound to protest against a perversion of fair argument, which can in no case be relied upon to support any principle, however good in itself. The nature of active temperance is to do enough. If this is recognised we need place no check upon the zeal of its advocates. No real advance, on the other hand, can be expected from the teaching of those who show in their own arguments and acts the absence of that restraint which they inculcate on others in respect of alcohol.

REPRESENTATION OF THE ROYAL UNIVERSITY OF IRELAND IN PARLIAMENT.

A MEETING of graduates of the Royal University of Ireland was held on Tuesday last, presided over by Dr. Lyons, M.P., to consider the claim of the University to representation in Parliament. Resolutions were adopted to the effect that the meeting desired to express in the strongest manner its opinion that the claim of the University to Parliamentary representation should not be ignored in the Redistribution Scheme now before the House, and that a deputation should be appointed to bring the question before the Government and the Legislature. The deputation will include Drs. Charles F. Knight, Robert D. Lyons, M.P., J. Wilson, and Sir William Mac Cormac.

DR. BRADLEY'S CASE.

THE investigations made by Mr. Rice furnish strong collateral evidence of the extreme improbability, if not the absolute impossibility, of the occurrences deposed to by the prosecutrix at the assizes. It passes our comprehension on what grounds the jury convicted, if the facts related in Mr. Rice's letter were substantially put before them. We have already commented on the inconsistency of the verdict; for clearly, if the woman's evidence was trustworthy, Dr. Bradley was guilty of a far graver crime than that for which he was sentenced to two years' hard labour. Nor can it be reasonably doubted, had the Lord Chief Justice, who tried the case, been informed of the fact, on high medical authority, that confirmed epileptics are often subject during their seizures to sensations of an erotic character, he would have viewed the whole affair with even greater incredulity than he gave expression to before the grand jury. With all submission, we contend that his lordship failed to put the correct interpretation on

Dr. Bradley's alleged conduct when he concluded that the loosening of the dress about the neck, and the sending away of the patient soon after the supposed fit, were facts supporting the theory of criminal assault. Judges are not infallible, nor can they be expected to be conversant with all the details of treatment in common usage of any and every condition which medical men are called upon to attend. The case, as it stands, is so entirely unsatisfactory, that it is not only advisable, but necessary, in the interest of justice, that it should be reopened. The Home Secretary can scarcely fail to order a commission of inquiry when the largely and influentially signed petition is laid before him. Since writing the above, we have received copies of memorials to the Home Secretary, from a large number of medical men in Nottingham, Chesterfield, and the adjoining districts, including the staffs of the public medical institutions in Nottingham and Chesterfield.

THE ELECTION OF HOUSE-SURGEON AT THE DONCASTER INFIRMARY.

WE learn that the recent election of a gentleman to fill the office of House-Surgeon to the Doncaster Infirmary and Dispensary was the occasion of a slight misunderstanding between the medical staff of the institution and some of the governors. It appears that the applications and testimonials of the thirty-eight candidates for the post were submitted to the staff for them to determine the question of eligibility for the office. But in their report the Medical Committee selected one gentleman as the candidate to be recommended to the governors for election. This appears to have given umbrage to some of the lay governors, and at the vote subsequently taken another gentleman was elected. We have nothing to say on this question as to whether the Medical Committee went beyond its privileges as detailed in the rules of the institution. But the general question is of wide interest. It appears to us that it is of the very highest importance to the prosperity of a hospital or infirmary that the resident medical officers who have to carry out the wishes of the visiting medical staff should possess the thorough confidence of the individual members of that body, and should realise to the full their responsibility to them, and look to them for support and approval. And therefore it is always found to conduce most to the harmony of these institutions to leave it to the staff to recommend to the Board or Governors generally the candidate they feel to be most acceptable to them. The staff are also able to judge best between the professional claims of rival candidates. When other modes of election are resorted to canvassing becomes necessary, and it is vain to hope that merit will always receive its just reward.

OUTBREAK OF TYPHUS IN CAMBERWELL.

UNDER the influence of increased sanitary energy and of improved sanitary organisation, typhus is becoming a rare disease in most of our large towns. After making due allowance for the improvement in the diagnosis of "fevers," the deaths referred to typhus have rapidly declined in recent years. In London, for instance, the deaths attributed to this cause have steadily declined from 716 in 1869, to 31 in 1884. There is, moreover, good ground for believing that of these thirty-one a considerable proportion were not cases of true typhus. Only thirty cases of typhus were admitted to the metropolitan asylum hospitals during last year, of which six terminated fatally. By the light of these figures the fact reported in the Registrar-General's last weekly return, that nineteen cases of typhus were admitted to these hospitals during the last week, is particularly noteworthy, more especially as the whole of them were admitted from Camberwell. It appears that a remarkable outbreak of typhus has occurred in that part of the Camberwell district known as New Peckham, as thirteen of the nineteen cases were admitted from Bexley-place, Bexley-alley, Downes-street, and Lower Park-road. In connexion with this outbreak, it may be noted that in the latter part of December a fatal case of typhus occurred in one of the metropolitan asylum hospitals that had been admitted from Verney-flats, Rotherhithe New-road, also situated in New Peckham, close to the locality of the present outbreak. The occurrence of this case should have been a warning to the local sanitary authority, which, however, would appear not to have been correctly informed as to the nature of the outbreak, as we believe that the recent cases, or at any rate a considerable number of them, were admitted to hospital as enteric fever cases.

"A WORD OF WARNING TO OXFORD MEN.

A CORRESPONDENT of the *Pall Mall Gazette*, signing himself "B.A.," has been a little too hasty in giving a "word of warning to Oxford men" upon the proposal that the University should recognise the final examination for medical diplomas of the two London Colleges as equivalent to passing an examination in precisely the same subjects and on precisely the same lines at Oxford. There is not the slightest intention to throw open the doors of the University to all holders of these diplomas; the Oxford graduates will still be required to fulfil the present University curriculum, and none but they will be enabled to present themselves for its medical degrees. As a matter of convenience, and of common sense, such graduates, who at the present time spend at least two years in acquiring clinical knowledge at the London hospitals, ending in the examinations of the London Royal Colleges, will pursue this course in future; but they will, supposing the scheme receive the sanction of Convocation, be exempt from the burden of submitting to two examinations on the same subjects. In order, however, that the University may establish its right to confer a stamp upon its graduates signifying that they have attained higher qualifications than the ordinary medical student, evidence of such higher knowledge, in the form of a thesis, will be required. The University will still conduct its purely scientific examinations, and it will remain, therefore, still true that, as "at present, no one is admitted even to the first examination for the Oxford Medical who has not taken his B.A. degree in the ordinary manner." Such is, we believe, the proposition that has so greatly alarmed the correspondent of our contemporary, and it seems to be one which will be of advantage all round.

DEATHS FROM HURRY AND EXERTION.

A FEW days since, a railway clerk, aged twenty, was found dead in a sitting posture in a second-class railway carriage when it arrived at Woolwich. At the inquest it was stated that deceased had been suffering from heart disease for two or three years, and it was supposed that he had hurried to catch the train that morning. The surgeon who made the post-mortem examination stated that the heart was enlarged. Another case of death from exertion in a man suffering from diseased heart occurred on the 11th inst. A signalman at Brixton railway station, while pulling one of the levers, suddenly fell backwards, and on the arrival of a surgeon was pronounced to be dead. The widow stated at the inquest that deceased had been treated for an affection of the heart for some time. In this case there does not seem to have been a post-mortem examination. Yet another death from exertion occurred on the 12th inst. A young lady, aged sixteen, expired suddenly in a gymnasium after performing a feat of skill. According to the medical evidence she was suffering from valvular disease of the

heart. How often has the hurry to catch a train, or some other sudden exertion, throwing extra work on a dilated, fatty, or otherwise diseased heart, resulted in fatal syncope! It is our duty to warn such patients of the risk they will run if they allow any consideration of business or convenience to tempt them to a single rash act of this kind.

KÜSSMAUL'S COMA.

THE group of symptoms which have been designated by the inexact name of "Küssmaul's coma" consists chiefly of slow and laboured respiration, rapid cardiac action, restlessness and pain, apyrexia, glycosuria, and paralytic distension of the stomach. An article containing a large amount of information on the literature of this subject has been written by Dr. Saundby in the *Birmingham Medical Review*. There seems to be no doubt that this group of symptoms may be met with in morbid states of the system unaccompanied by glycosuria. That the symptoms are caused by a poisoned condition of the blood seems most probable. It may be well to point out that two of the chief symptoms may be explained on the assumption of paralysis of the vagus nucleus. The slow and laboured respiration somewhat resembles that form of dyspnœa which is the result of section of both vagi; the acceleration of the heart's action might be attributed to the more or less complete removal of the inhibitory cardiac functions of the vagus nucleus. Whether damage of the vagus nucleus can determine paralytic distension of the intestines must remain a purely speculative question. Epigastric pain or distressing sensations about the epigastrium have been referred, in epileptic seizures, to central disturbance of the vagus paths. We have not the least bias in favour of the supposition that all the symptoms of so-called Küssmaul's coma are due to interference with the vagus nucleus, though it may be well to consider the claims of such a suggestion. Alkaloids have a selective action on many parts of the nervous system, and there is the bare possibility that Küssmaul's coma may be the work of some alkaloid having a selective action on the vagus centres.

THE ANTI-VACCINATION ACTS AT LEICESTER.

LEICESTER will one of these days be very rudely undeceived on the subject of vaccination. The accumulation of unvaccinated children is going on apace. The fool's paradise in which the defaulting parents are living is all very well till the day of small-pox comes, and then they will find how pregnant with death and disaster this disease is, from which science and beneficent legislation have provided a protection that, generously used, might be made all but absolute. Meantime it is the duty of the Legislature to take prompt measures for making the Acts more efficient.

LINCOLN WATER-SUPPLY.

THE question of the wholesomeness of the water-supply for the city of Lincoln was the subject of a lengthened discussion at the last meeting of the Town Council. The water has been under suspicion, and hence analyses have been ordered. But the Local Government Board have informed the sanitary authority that knowledge of the chemical ingredients of a water, however complete, does not suffice to form an opinion of its wholesomeness, and they have urged that examination of the several sources of supply should be made in order to ascertain what are the risks of contamination to which they may be subjected. Mr. Councillor Watkins evidently saw the importance of this examination, but a worthy alderman held a different view. Mr. Alderman Maltby declared that if he knew anything about analyses he he was satisfied that there could be no germs of disease about a water that had been pronounced by an analyst to be chemically pure. The little word *if* makes the alderman's statement an eminently safe one. But before the matter again comes under discussion we would advise the alderman to increase his knowledge of the subject by reading the report to which the Local Government Board has drawn the attention of the Council, and he will there find that a water to which a filtrate of typhoid excrement had been deliberately added was found, in the hands of a leading analytical chemist, to give results which would have enabled him to class it as one of organic purity. "Polluting material, potent for harm," according to that report, "may be present in a water ..... without removing it from the rank of waters" classed by the chemist in question as of "extraordinary organic purity."

UNIVERSITY COLLEGE HOSPITAL.

SOME changes are about to occur in the surgical staff of University College Hospital. The chair of Surgery at the College and the post of Surgeon to the hospital are vacant by the resignation of Professor J. Marshall, F.R.S. The post of anæsthetist to the hospital, which has been vacant since the death of Mr. Clover, has recently been filled by the election of Dr. Dudley W. Buxton to the office.

THE INSPECTION OF PARIS HOTELS.

THE Paris Prefect of Police, M. Camescasse, has just issued a decree reorganising the service for the inspection of lodging-houses, hotels, &c. There are to be six inspectors and four assistant inspectors, who will divide Paris between them into ten districts. They will visit every hotel or lodging-house at least once a year; but all new establishments of this description must be inspected within five days of their first opening. On the outbreak of any contagious disease, the inspector of the district must at once examine the place and report whether any special measures are necessary. To this ordinance we would object—first, that the number of inspectors for such an immense town as Paris is altogether insufficient; and, secondly, that a large portion of the more unwholesome lodgings of Paris have already been visited by the Commission des Logements Insalubres. Eloquent reports have been issued by Dr. Dumesnil and other members of this commission; but, broadly speaking, nothing has been done. If the appointment of a new body of inspectors can infuse fresh energy into the minds of the superior authorities, then some good will result, otherwise we fear that the new decree of the Prefect of Police will only tend to engender a sense of false security.

COLLECTIVE INVESTIGATION OF DISEASE.

THE Medical Society of the State of Pennsylvania have formed a committee to carry into effect a scheme of collective investigation, on the same lines as that initiated by the British Medical Association. Cards upon acute pneumonia, chorea, and acute rheumatism, drawn up precisely like those of the latter Association, have been circulated, with the request that returns be made not later than the 1st day of April, 1885, in order that reports may be compiled for presentation to the annual meeting of the Society in May. The committee point out that by adopting the British method without alteration it has secured the advantages of uniformity, and thus enabled the scheme to have an international application. In Germany the first report of the Collective Investigation Committee dealing with tuberculosis has been published in the *Zeitschrift für Klin. Medicin*, Bd. 8, Heft 6. The inquiry embraced a very wide field, and only about two hundred replies were received, several of which had to be rejected owing to their incompleteness. It is not considered that the results as yet obtained embrace a sufficiently large number to draw any very definite conclusions therefrom.

THE CHEAPNESS OF QUININE.

QUININE is said to be cheaper almost than it has ever been. Few facts are more important to mankind, next to the price of wheat and meat. In our temperate climate the price of quinine is of less interest than in hot climates and marshy regions. Yet with us how large is the scale of its use, and how specific the benefits which it confers in neuralgia, in puerperal and other pyrexiæ, in rheumatic fever, and in debility of all kinds. But in tropical countries, and especially for Europeans in these, it is almost essential to the preservation of life. In these days of Suez and Panama Canals, of African exploration and colonisation, and of Nile expeditions, the cheapness of quinine is of pleasant and prodigious consequence. It would be very instructive if there were attached to all these undertakings a subordinate of the Registrar-General. We should then know on what a scale life is sacrificed where quinine is withheld, and how unequal is the risk to the rich man who has the quinine and the poor man who has it not. With the growing cheapness of quinine there will be less excuse for this discrepancy in the future.

SMALL-POX IN THE METROPOLIS.

SMALL-POX has made further progress in the metropolis during the past fortnight, and the managers of the Asylums Board have in consequence addressed the various boards of guardians, urging upon them to make house-to-house visitations with a view of securing the vaccination of children whose primary vaccination has been neglected, and the revaccination of others.

THE BOWER AND KEATES FUND.

As inquiries have been made in regard to the settlement of this fund, the honorary secretary (Dr. R. W. Burnet) desires us to state that the plaintiffs having obtained motion for a new trial, and having as yet taken no further action in the matter, the committee cannot issue a statement until the case is finally settled.

A STATEMENT has been published of the numbers and nationality of the medical practitioners who have recently attended the special courses held by Dr. Koch at the Imperial Board of Health, from September to January, upon the methods of investigation employed in cholera research. Eleven courses were given, consisting of about ten days each, and the total number of those sharing in them was 146. The large majority were from various parts of Germany, but the list includes twenty foreign practitioners—from Austro-Hungary, Russia, Great Britain, Italy, Spain, Sweden, Luxemburg, North America, and Australia.

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should have adopted, on grounds which are open to dispute, a course which cannot fail to create strong feelings of opposition on the part of an influential class in Bombay, and which will, in all probability, curtail the benefits conferred by the European Hospital, at least during the prevalence of cholera. If no other site can be obtained in the district, the Government ought to assign this as a justifiable reason for the course they have adopted; if one can be had, then, in deference to the wishes of the committee and in the interests of humanity, they should without hesitation rescind the resolution and take steps to provide the requisite accommodation in some less objectionable situation.

PAROCHIAL MEDICAL LEGISLATION IN THE UNITED STATES.

OUR readers are well aware how deeply we sympathise with the large section of the profession in the United States who wish to place medical education and examination on a satisfactory footing, and to abate the number of diploma factories. The difficulties which have to be surmounted in a young and democratic country are very great. They have an illustration in the case of the State of Pennsylvania, where a Bill has been prepared to create a "State Board of Medical Examiners and Licensers." We confess we shall not be grieved if we hear of the failure of this attempt at legislation. It provides that the governor of the State shall appoint a board of nine examiners and licensers. He is to choose seven from a list of twenty-one names submitted by the Medical Society of the State, and two from a list of six submitted by the Homœopathic Medical Society of the State. The only qualifications of the examiners are that they shall be graduates of a legally chartered college, and shall have practised five years. But they must not be members of the faculties of any such college or university. Examiners selected from practitioners not teachers will, at any rate, not be very severe or exacting in anatomy, physiology, histology, general chemistry, &c., to say nothing of pathology, therapeutics, &c. The importation of homœopaths into the examining board is a violation of the rule of all European States. We quite approve of our own rule, which protects a candidate from rejection on the ground of his medical theories; but to give homœopaths a place in an examining board is another matter. But the parochialism of the legislation reaches its climax in Section 9, which provides that after the 1st of September, 1886, no person shall practise in Pennsylvania (be he graduate of Berlin, Paris, London, Edinburgh, or New York) who has not passed the gate presided over by these nine chosen practitioners of Pennsylvania. This is the story of the three tailors of Tooley-street with a vengeance. Such a Bill is not calculated to restore European respect for medical legislation in the State of Pennsylvania.

INTEMPERATE ADVOCACY OF TEMPERANCE.

TEMPERANCE in regard to stimulant drinks, as one of the leading social questions of our day, naturally gathers round it much variety of opinion. Written and spoken disquisitions upon it are common in every town and village, and vary in their cast, though not in their foundation of fact, according as the subject is considered from a moral, a sanitary, or a political standpoint. In truth, the more we widen the area of such considerations and give to each its due place, the sooner are we likely to arrive at a practical result in the direction of drink reform. The solution of the difficulty is not to be attained by pushing any one of the several theories of amendment to an unfair degree, but rather by consolidating into one remedial force the common and necessary points in which all agree. Our own view we may describe as a temperate and even an abstinent one. It does not at all ignore the great moral evil which has attended the ready and regular consumption of alcohol as a beverage, nor does it fail to observe and advocate what is now a cardinal doctrine in the hygiene of temperance—the uselessness for any good, and the frequent injury, which arises from the habitual use of stimulants by the sound in health who need no stimulation. But having said thus much, we have reached the limit which reason and fairness impose. The conditions of disease and allied states of physical exhaustion afford many instances in which we can alone rely, for the furtherance of nutrition or the support of flagging power at some crisis, on a stimulant, and it must also be admitted that at times the alcoholic form is preferable to any other. This view of the question is the one which has for long commended itself to the judgment of the medical profession, as well as probably to that of many others, not professionally interested, who have sought to guide their decision by the light of experimental and practical proofs. When, therefore we read of statements being made by extreme advocates of so-called temperance, to the effect that medical men prescribe stimulants in order to increase their practice—that is, to generate disease; that under no possible circumstances should alcohol be taken internally; and that an increasing general death-rate is the gauge of our retrogression into drunkenness, as was lately stated by Dr. J. H. Aldridge—we are bound to protest against a perversion of fair argument, which can in no case be relied upon to support any principle, however good in itself. The nature of active temperance is to do enough. If this is recognised we need place no check upon the zeal of its advocates. No real advance, on the other hand, can be expected from the teaching of those who show in their own arguments and acts the absence of that restraint which they inculcate on others in respect of alcohol.

REPRESENTATION OF THE ROYAL UNIVERSITY OF IRELAND IN PARLIAMENT.

A MEETING of graduates of the Royal University of Ireland was held on Tuesday last, presided over by Dr. Lyons, M.P., to consider the claim of the University to representation in Parliament. Resolutions were adopted to the effect that the meeting desired to express in the strongest manner its opinion that the claim of the University to Parliamentary representation should not be ignored in the Redistribution Scheme now before the House, and that a deputation should be appointed to bring the question before the Government and the Legislature. The deputation will include Drs. Charles F. Knight, Robert D. Lyons, M.P., J. Wilson, and Sir William Mac Cormac.

DR. BRADLEY'S CASE.

THE investigations made by Mr. Rice furnish strong collateral evidence of the extreme improbability, if not the absolute impossibility, of the occurrences deposed to by the prosecutrix at the assizes. It passes our comprehension on what grounds the jury convicted, if the facts related in Mr. Rice's letter were substantially put before them. We have already commented on the inconsistency of the verdict; for clearly, if the woman's evidence was trustworthy, Dr. Bradley was guilty of a far graver crime than that for which he was sentenced to two years' hard labour. Nor can it be reasonably doubted, had the Lord Chief Justice, who tried the case, been informed of the fact, on high medical authority, that confirmed epileptics are often subject during their seizures to sensations of an erotic character, he would have viewed the whole affair with even greater incredulity than he gave expression to before the grand jury. With all submission, we contend that his lordship failed to put the correct interpretation on

Dr. Bradley's alleged conduct when he concluded that the loosening of the dress about the neck, and the sending away of the patient soon after the supposed fit, were facts supporting the theory of criminal assault. Judges are not infallible, nor can they be expected to be conversant with all the details of treatment in common usage of any and every condition which medical men are called upon to attend. The case, as it stands, is so entirely unsatisfactory, that it is not only advisable, but necessary, in the interest of justice, that it should be reopened. The Home Secretary can scarcely fail to order a commission of inquiry when the largely and influentially signed petition is laid before him. Since writing the above, we have received copies of memorials to the Home Secretary, from a large number of medical men in Nottingham, Chesterfield, and the adjoining districts, including the staffs of the public medical institutions in Nottingham and Chesterfield.

THE ELECTION OF HOUSE-SURGEON AT THE DONCASTER INFIRMARY.

We learn that the recent election of a gentleman to fill the office of House-Surgeon to the Doncaster Infirmary and Dispensary was the occasion of a slight misunderstanding between the medical staff of the institution and some of the governors. It appears that the applications and testimonials of the thirty-eight candidates for the post were submitted to the staff for them to determine the question of eligibility for the office. But in their report the Medical Committee selected one gentleman as the candidate to be recommended to the governors for election. This appears to have given umbrage to some of the lay governors, and at the vote subsequently taken another gentleman was elected. We have nothing to say on this question as to whether the Medical Committee went beyond its privileges as detailed in the rules of the institution. But the general question is of wide interest. It appears to us that it is of the very highest importance to the prosperity of a hospital or infirmary that the resident medical officers who have to carry out the wishes of the visiting medical staff should possess the thorough confidence of the individual members of that body, and should realise to the full their responsibility to them, and look to them for support and approval. And therefore it is always found to conduce most to the harmony of these institutions to leave it to the staff to recommend to the Board or Governors generally the candidate they feel to be most acceptable to them. The staff are also able to judge best between the professional claims of rival candidates. When other modes of election are resorted to canvassing becomes necessary, and it is vain to hope that merit will always receive its just reward.

OUTBREAK OF TYPHUS IN CAMBERWELL.

Under the influence of increased sanitary energy and of improved sanitary organisation, typhus is becoming a rare disease in most of our large towns. After making due allowance for the improvement in the diagnosis of "fevers," the deaths referred to typhus have rapidly declined in recent years. In London, for instance, the deaths attributed to this cause have steadily declined from 716 in 1869, to 31 in 1884. There is, moreover, good ground for believing that of these thirty-one a considerable proportion were not cases of true typhus. Only thirty cases of typhus were admitted to the metropolitan asylum hospitals during last year, of which six terminated fatally. By the light of these figures the fact reported in the Registrar-General's last weekly return, that nineteen cases of typhus were admitted to these hospitals during the last week, is particularly noteworthy, more especially as the whole of them were admitted from Camberwell. It appears that a remarkable outbreak of typhus has occurred in that part of the Camberwell district known as New Peckham, as thirteen of the nineteen cases were admitted from Bexley-place, Bexley-alley, Downes-street, and Lower Park-road. In connexion with this outbreak, it may be noted that in the latter part of December a fatal case of typhus occurred in one of the metropolitan asylum hospitals that had been admitted from Verney-flats, Rotherhithe New-road, also situated in New Peckham, close to the locality of the present outbreak. The occurrence of this case should have been a warning to the local sanitary authority, which, however, would appear not to have been correctly informed as to the nature of the outbreak, as we believe that the recent cases, or at any rate a considerable number of them, were admitted to hospital as enteric fever cases.

"A WORD OF WARNING TO OXFORD MEN.

A correspondent of the *Pall Mall Gazette*, signing himself "B.A.," has been a little too hasty in giving a "word of warning to Oxford men" upon the proposal that the University should recognise the final examination for medical diplomas of the two London Colleges as equivalent to passing an examination in precisely the same subjects and on precisely the same lines at Oxford. There is not the slightest intention to throw open the doors of the University to all holders of these diplomas; the Oxford graduates will still be required to fulfil the present University curriculum, and none but they will be enabled to present themselves for its medical degrees. As a matter of convenience, and of common sense, such graduates, who at the present time spend at least two years in acquiring clinical knowledge at the London hospitals, ending in the examinations of the London Royal Colleges, will pursue this course in future; but they will, supposing the scheme receive the sanction of Convocation, be exempt from the burden of submitting to two examinations on the same subjects. In order, however, that the University may establish its right to confer a stamp upon its graduates signifying that they have attained higher qualifications than the ordinary medical student, evidence of such higher knowledge, in the form of a thesis, will be required. The University will still conduct its purely scientific examinations, and it will remain, therefore, still true that, as "at present, no one is admitted even to the first examination for the Oxford Medical who has not taken his B.A. degree in the ordinary manner." Such is, we believe, the proposition that has so greatly alarmed the correspondent of our contemporary, and it seems to be one which will be of advantage all round.

DEATHS FROM HURRY AND EXERTION.

A few days since, a railway clerk, aged twenty, was found dead in a sitting posture in a second-class railway carriage when it arrived at Woolwich. At the inquest it was stated that deceased had been suffering from heart disease for two or three years, and it was supposed that he had hurried to catch the train that morning. The surgeon who made the post-mortem examination stated that the heart was enlarged. Another case of death from exertion in a man suffering from diseased heart occurred on the 11th inst. A signalman at Brixton railway station, while pulling one of the levers, suddenly fell backwards, and on the arrival of a surgeon was pronounced to be dead. The widow stated at the inquest that deceased had been treated for an affection of the heart for some time. In this case there does not seem to have been a post-mortem examination. Yet another death from exertion occurred on the 12th inst. A young lady, aged sixteen, expired suddenly in a gymnasium after performing a feat of skill. According to the medical evidence she was suffering from valvular disease of the

heart. How often has the hurry to catch a train, or some other sudden exertion, throwing extra work on a dilated, fatty, or otherwise diseased heart, resulted in fatal syncope! It is our duty to warn such patients of the risk they will run if they allow any consideration of business or convenience to tempt them to a single rash act of this kind.

KÜSSMAUL'S COMA.

THE group of symptoms which have been designated by the inexact name of "Küssmaul's coma" consists chiefly of slow and laboured respiration, rapid cardiac action, restlessness and pain, apyrexia, glycosuria, and paralytic distension of the stomach. An article containing a large amount of information on the literature of this subject has been written by Dr. Saundby in the *Birmingham Medical Review*. There seems to be no doubt that this group of symptoms may be met with in morbid states of the system unaccompanied by glycosuria. That the symptoms are caused by a poisoned condition of the blood seems most probable. It may be well to point out that two of the chief symptoms may be explained on the assumption of paralysis of the vagus nucleus. The slow and laboured respiration somewhat resembles that form of dyspnœa which is the result of section of both vagi; the acceleration of the heart's action might be attributed to the more or less complete removal of the inhibitory cardiac functions of the vagus nucleus. Whether damage of the vagus nucleus can determine paralytic distension of the intestines must remain a purely speculative question. Epigastric pain or distressing sensations about the epigastrium have been referred, in epileptic seizures, to central disturbance of the vagus paths. We have not the least bias in favour of the supposition that all the symptoms of so-called Küssmaul's coma are due to interference with the vagus nucleus, though it may be well to consider the claims of such a suggestion. Alkaloids have a selective action on many parts of the nervous system, and there is the bare possibility that Küssmaul's coma may be the work of some alkaloid having a selective action on the vagus centres.

THE ANTI-VACCINATION ACTS AT LEICESTER.

LEICESTER will one of these days be very rudely undeceived on the subject of vaccination. The accumulation of unvaccinated children is going on apace. The fool's paradise in which the defaulting parents are living is all very well till the day of small-pox comes, and then they will find how pregnant with death and disaster this disease is, from which science and beneficent legislation have provided a protection that, generously used, might be made all but absolute. Meantime it is the duty of the Legislature to take prompt measures for making the Acts more efficient.

LINCOLN WATER-SUPPLY.

THE question of the wholesomeness of the water-supply for the city of Lincoln was the subject of a lengthened discussion at the last meeting of the Town Council. The water has been under suspicion, and hence analyses have been ordered. But the Local Government Board have informed the sanitary authority that knowledge of the chemical ingredients of a water, however complete, does not suffice to form an opinion of its wholesomeness, and they have urged that examination of the several sources of supply should be made in order to ascertain what are the risks of contamination to which they may be subjected. Mr. Councillor Watkins evidently saw the importance of this examination, but a worthy alderman held a different view. Mr. Alderman Maltby declared that if he knew anything about analyses he he was satisfied that there could be no germs of disease about a water that had been pronounced by an analyst to be chemically pure. The little word *if* makes the alderman's statement an eminently safe one. But before the matter again comes under discussion we would advise the alderman to increase his knowledge of the subject by reading the report to which the Local Government Board has drawn the attention of the Council, and he will there find that a water to which a filtrate of typhoid excrement had been deliberately added was found, in the hands of a leading analytical chemist, to give results which would have enabled him to class it as one of organic purity. "Polluting material, potent for harm," according to that report, "may be present in a water..... without removing it from the rank of waters" classed by the chemist in question as of "extraordinary organic purity."

UNIVERSITY COLLEGE HOSPITAL.

SOME changes are about to occur in the surgical staff of University College Hospital. The chair of Surgery at the College and the post of Surgeon to the hospital are vacant by the resignation of Professor J. Marshall, F.R.S. The post of anæsthetist to the hospital, which has been vacant since the death of Mr. Clover, has recently been filled by the election of Dr. Dudley W. Buxton to the office.

THE INSPECTION OF PARIS HOTELS.

THE Paris Prefect of Police, M. Camescasse, has just issued a decree reorganising the service for the inspection of lodging-houses, hotels, &c. There are to be six inspectors and four assistant inspectors, who will divide Paris between them into ten districts. They will visit every hotel or lodging-house at least once a year; but all new establishments of this description must be inspected within five days of their first opening. On the outbreak of any contagious disease, the inspector of the district must at once examine the place and report whether any special measures are necessary. To this ordinance we would object—first, that the number of inspectors for such an immense town as Paris is altogether insufficient; and, secondly, that a large portion of the more unwholesome lodgings of Paris have already been visited by the Commission des Logements Insalubres. Eloquent reports have been issued by Dr. Dumesnil and other members of this commission; but, broadly speaking, nothing has been done. If the appointment of a new body of inspectors can infuse fresh energy into the minds of the superior authorities, then some good will result, otherwise we fear that the new decree of the Prefect of Police will only tend to engender a sense of false security.

COLLECTIVE INVESTIGATION OF DISEASE.

THE Medical Society of the State of Pennsylvania have formed a committee to carry into effect a scheme of collective investigation, on the same lines as that initiated by the British Medical Association. Cards upon acute pneumonia, chorea, and acute rheumatism, drawn up precisely like those of the latter Association, have been circulated, with the request that returns be made not later than the 1st day of April, 1885, in order that reports may be compiled for presentation to the annual meeting of the Society in May. The committee point out that by adopting the British method without alteration it has secured the advantages of uniformity, and thus enabled the scheme to have an international application. In Germany the first report of the Collective Investigation Committee dealing with tuberculosis has been published in the *Zeitschrift für Klin. Medicin*, Bd. 8, Heft 6. The inquiry embraced a very wide field, and only about two hundred replies were received, several of which had to be rejected owing to their incompleteness. It is not considered that the results as yet obtained embrace a sufficiently large number to draw any very definite conclusions therefrom.

THE CHEAPNESS OF QUININE.

QUININE is said to be cheaper almost than it has ever been. Few facts are more important to mankind, next to the price of wheat and meat. In our temperate climate the price of quinine is of less interest than in hot climates and marshy regions. Yet with us how large is the scale of its use, and how specific the benefits which it confers in neuralgia, in puerperal and other pyrexiæ, in rheumatic fever, and in debility of all kinds. But in tropical countries, and especially for Europeans in these, it is almost essential to the preservation of life. In these days of Suez and Panama Canals, of African exploration and colonisation, and of Nile expeditions, the cheapness of quinine is of pleasant and prodigious consequence. It would be very instructive if there were attached to all these undertakings a subordinate of the Registrar-General. We should then know on what a scale life is sacrificed where quinine is withheld, and how unequal is the risk to the rich man who has the quinine and the poor man who has it not. With the growing cheapness of quinine there will be less excuse for this discrepancy in the future.

SMALL-POX IN THE METROPOLIS.

SMALL-POX has made further progress in the metropolis during the past fortnight, and the managers of the Asylums Board have in consequence addressed the various boards of guardians, urging upon them to make house-to-house visitations with a view of securing the vaccination of children whose primary vaccination has been neglected, and the revaccination of others.

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Pharmacology and Therapeutics.

THE ST. DALMAS' CHEST AND BACK PLASTERS.

THESE are perforated plasters spread on scarlet felt. There are several varieties, the most generally useful being the ordinary strengthening plaster and the plasters of belladonna and capsicum. They are useful and deserve a trial.

CINCHONIDINE AND PICROTOXINE.

The following conclusions have been arrived at by Dr. Chirone as the result of a careful series of experiments on animals with bisulphate of cinchonidine and with picrotoxine. 1. There are poisons like cinchonidine and picrotoxine which are capable of causing genuine epileptic attacks. Cinchonidine acts chiefly by irritating the cortical motor centres, and picrotoxine acts on the centres in the medulla oblongata. 2. Cinchonidine does not cause convulsion in animals from which the brain has been removed; when certain of the motor centres have been taken away the convulsions do not occur in those groups of muscles innervated by the removed centres. Picrotoxine, however, has a toxic action of a more energetic kind on the same animals. 3. The convulsions called forth by these poisons, although of an epileptiform nature, nevertheless present notable differences even in the same animal; animals are affected according to the degree of development of their nervous system, and according to special circumstances of their existence. All vertebrated animals are affected, even amphioxus. The invertebrated animals present no phenomena when treated by these agents. 4. Cinchonidine, whilst killing rabbits, does not always cause epileptic phenomena; these animals, however, do react to picrotoxine. 5. Cinchonidine does not, though picrotoxine does, cause convulsive phenomena in hibernating animals, at all events during summer. 6. In the higher mammals the convulsions of cerebral origin induced by cinchonidine always commence in the muscles of the face, and extend gradually to those of the neck, front limbs, and so forth. The convulsions due to picrotoxine generally commence with tremors of the head or of the entire body. The spasm from cinchonidine at the onset is clonic, whilst that of picrotoxine is at the outset tonic. The ocular muscles and those of the pupil and tongue take but little part in the phenomena induced by cinchonidine, whilst the reverse holds good for picrotoxine. Picrotoxine causes a cadaveric rigidity, which is seen before, and persists a long time after, death; whilst cinchonidine does not disturb the usual phenomena of post-mortem rigidity.

NAPHTHALINE IN CYSTITIS.

Naphthaline, one of the solid products of petroleum, insoluble in water, has been recommended for internal administration by Rossbach in cases of cystitis with ammoniacal urine. Dr. Cushing lately spoke of its value at a meeting of the Suffolk Medical Society (U.S.), citing a case where he had given powders containing about two grains of the drug in wafers or capsules mixed with water or flaxseed tea. Before the treatment was commenced the bladder had been washed out daily with carbolic solutions, and on the second day of the naphthaline treatment all foul odour had disappeared. Subsequently local treatment with boracic acid injections was combined with naphthaline internally. Naphthaline appears to have a most powerful antiseptic action, and Rossbach was led to its employment in cystitis by noting that it arrested fermentation of urine. The formula recommended by Rossbach is:—℞ Naphthalini puriss., sacch. alb., ää 5·00 grammes; ol. bergamottæ, ·03 gramme. M. fiat pulv. No. xx.

A SPURIOUS CUBEB.

The *Pharmaceutical Journal* states that a spurious cubeb has been recently offered in the London market. It consists of the fruit of Daphnidium cubeba, which closely resembles cubebs in general appearance. According to Loureiro, these fruits are used by the Cochin-Chinese as a nervine tonic in paralysis, vertigo, melancholia, and other nervous disorders. The fresh fruits are used for preserving fish, and hence, probably, contain some antiseptic agent. The Chinese, according to Porter Smith, use the fruits for bronchitic, dyspeptic, cystic, and choleraic affections.

CONIUM MACULATUM.

Orfila states, in his Traité de Toxicologie, that having administered large quantities of the juice of conium maculatum to a dog, he was surprised to find that no effect was produced. The root of the plant would appear, therefore, to differ from that of aconite and of belladonna in being very poor in alkaloid. M. Lepage of Gisors has worked at this subject, and confirms the statements of Orfila. The largest quantity of conicine was found in the fruit of the plant.

AUSTRIAN MEDICAL STATISTICS.

THE Austrian statisticians work very carefully and correctly, but too slowly. Only a few days ago the report of the I. a. R. Central Board for Statistics, which deals with the sanitary condition of the Austrian provinces (those which belong to Hungary excepted) in 1881, appeared. The most important data, which are of interest also for foreign physicians, are the following:—

In 1881 there were 159 public hospitals, containing 19,731 beds and 118,156 patients; and 375 private ones, containing 9436 beds and 67,477 patients. On an average, 1 per 82 inhabitants sought relief in a hospital; 53 hospitals containing 2776 beds and 37,744 patients belonged to religious orders. The largest hospital on the Continent is the I. a. R. "Allgemeine Krankenhaus" (universal hospital) in Vienna, containing 20 divisions, amongst which 5 for internal medicine, 3 for surgery, 2 for syphilis, 1 for diseases of women, 1 for diseases of the eye, 1 for chest diseases, 1 for cutaneous diseases, 1 for mental debilities; further, the division of the Union for the protection of sick students "(Studentenkrankenverein,") and 2 divisions, 1 for internal and 1 for external medicine, for well-to-do people. These divisions are managed by 13 chief physicians and 39 assistants. This hospital possesses, besides these divisions, 13 clinics—viz., 2 for internal medicine, 2 for surgery, 2 for ophthalmology, 2 for gynæcology, 1 for syphilis, 1 for dermatology, 1 for laryngology, 1 for otiatria, and 1 for mental debilities. On an average 25,000 patients are yearly treated in this institution.

The number of lunatic asylums amounted to 27, of which 22 are public and 5 private, containing 7002 beds and 9694 patients. Of these patients 646—that is, 6·7 per cent.—were cured; 1692 (17·4 per cent.) were dismissed still insane or transferred to another hospital; and 1237 (12·8 per cent.) died; so that at the end of the year 6119 (63·1 per cent.) remained under treatment.

	Males.	Females.
Unmarried	32·0 per cent.	24·1 per cent.
Married	20·8 „	15·6 „
Widowed	2·2 „	5·3 „
Total	55 „	45 „

On an average, out of 100,000 inhabitants 42 were insane, inferring from those who were treated in these asylums. As to the age of the insane, the official statistics show the following figures:—

Under 10 years	0·2 per cent.
Between 10 and 15 years	0·8 „
„ 15 „ 20 „	5·1 „
From 20 to 25 „	9·8 „
„ 25 „ 30 „	13·1 „
„ 30 „ 40 „	29·4 „
„ 40 „ 45 „	13·5 „
„ 45 „ 50 „	10·5 „
„ 50 „ 55 „	7·3 „
Insane aged over 55 „	10·3 „
Total	100·0

As to creed:—

91·1 per cent.	Roman Catholics.
1·9 „	Protestants.
0·4 „	Greek Oriental.
6·6 „	Jews.

Outside of the asylums the insane numbered at the end of 1881 (only in the Austrian provinces) 20,001—that is, 91 per 100,000 inhabitants.

The number of cretins amounted to 15,151—that is, 69 per 100,000 inhabitants. In the Alps, especially in Carinthia, their number increased enormously—for instance, in the district of Murau the proportion of cretins to the population was 1078 to 100,000.

Eighteen public lying-in institutions existed, with 1486

beds, 17,483 mothers, and 16,165 children, whereof 127 mothers, or 0·72 per cent., and 1013 children, or 6·27 per cent., died; 15,987 births were registered; out of 1000 deliveries 13·3 were twin births and 0·006 triplets.

Twelve foundling hospitals existed, with 448 beds for the children and 256 beds for the wet-nurses. The children are retained in these hospitals only a short time, and then delivered to foster-parents. The rate of mortality of the children in the hospitals amounted to 6·08 per cent., whereas that of the children with foster-parents reached 12·83 per cent.

Fifteen institutions for the deaf and dumb existed, with 1204 inmates, whereof 47·7 per cent. were born deaf and dumb.

Nine establishments for the education of blind people existed, with 476 inmates at the beginning and 445 at the end of the year, whereof 14·6 per cent. were born blind, 79·2 per cent. became blind through diseases, and 6·2 per cent. through accident.

In fourteen institutions for vaccination 11,835 lancets impregnated with vaccine matter and 11,627 phials were sold.

Austria possesses 206 bathing places, which were visited by 166,087 persons. The Tyrol has the greatest number of bathing places—namely, 80; whereas the Bohemian places (22) had the greatest number of visitors—namely, 69,016.

The number of physicians amounted to 7427 (4766 doctors and 2661 surgeons, who, in Austria, rank lower than the doctors). On an average, there is one physician to every 2960 inhabitants; but in Galicia there is one to every 7209 inhabitants; whilst in the towns—for instance, in Innsbruck—one to 390, and in Vienna one to 639 inhabitants. The number of midwives amounted to 16,298—one midwife for every 1348 inhabitants.

Per 100,000 inhabitants, 3164 (3·164 per cent.) died. The highest rate of mortality was registered in Bukowina, 3·764 per cent.; the next highest rate in Galicia, 3·653 per cent.; the lowest rates in Dalmatia, 2·137 per cent., and in the Tyrol, 2·455 per cent. Per 100,000 male inhabitants 3387 died, whilst from an equal number of female inhabitants only 2953 died. The proportion of male self-murderers to female is 4½ to 1.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6352 births and 3571 deaths were registered during the week ending the 14th inst. The births exceeded by 538, while the deaths were 56 below, the average weekly numbers during 1884. The annual death-rate in these towns, which had been equal to 24·5 and 21·8 per 1000 in the preceding two weeks, further declined last week to 20·9. During the first six weeks of the current quarter the death-rate in these towns averaged 23·4 per 1000, against 24·7, the mean rate in the corresponding periods of the five years 1880-84. The lowest death-rates in these towns last week were 13·5 in Birkenhead, 15·1 in Salford and in Derby, and 16·8 in Brighton. The rates in the other towns ranged upwards to 27·5 in Norwich, 31·2 in Preston, 32·3 in Cardiff, and 32·5 in Sunderland. The deaths referred to the principal zymotic diseases in the twenty-eight towns were 398, against 397 and 356 in the preceding two weeks; they included 112 from whooping-cough, 91 from measles, 53 from scarlet fever, 41 from "fever" (principally enteric), 40 from small-pox, 35 from diphtheria, and 26 from diarrhœa. No death from any of these zymotic diseases were recorded last week either in Brighton or in Plymouth; whereas they caused the highest death-rates in Norwich, Cardiff, and Sunderland. The highest death-rates from whooping-cough occurred in Preston and Nottingham; from measles in Cardiff, Huddersfield, and Sunderland; from scarlet fever in Leicester and Preston; and from "fever" in Norwich. The 35 deaths from diphtheria in the twenty-eight towns included 16 in London, 9 in Liverpool, and 2 in Nottingham. Small-pox caused 57 deaths in London and its outer ring of suburban districts, 3 in Birmingham, 2 in Sheffield, and 1 in Liverpool. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 1146 and 1144 on the preceding two Saturdays, had risen to 1223 at the end of last week; a higher number than has been under treatment since July last; the cases admitted last week were 255, against 287, 253, and 223 in the preceding three weeks. The Highgate Small-pox Hospital contained 96 patients on Saturday last, 29 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 556 and 421 in the preceding two weeks, further declined to 383 last week, and were no fewer than 238 below the corrected weekly average. The causes of 84, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Leicester, Salford, and in six other smaller towns. The largest proportions of uncertified deaths were registered in Oldham, Preston, Derby, Halifax, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had been equal to 30·2 and 26·6 per 1000 in the preceding two weeks, further declined to 25·0 in the week ending the 14th inst., but exceeded by no less than 4·1 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 15·8 and 16·6 in Edinburgh and Perth, to 26·8 in Greenock, 28·0 in Dundee, and 29·6 in Glasgow. The 609 deaths in the eight towns included 29 which were referred to whooping-cough, 25 to measles, 13 to diarrhœa, 12 to scarlet fever, 10 to "fever" (typhus, enteric, or simple), 6 to diphtheria, and not one to small-pox; in all, 95 deaths resulted from these principal zymotic diseases, against 98 and 92 in the preceding two weeks. These 95 deaths were equal to an annual rate of 3·9 per 1000, which was 1·6 above the mean rate from the same diseases in the twenty-eight English towns. The 29 deaths from whooping-cough showed a decline of 5 from the number in the previous week, and included 7 in Glasgow, 5 in Dundee, 5 in Leith, and 4 in Greenock. The 25 fatal cases of measles showed a further increase upon recent weekly numbers; 17 occurred in Glasgow, 5 in Dundee, and 3 in Aberdeen. The 13 deaths attributed to diarrhœa showed an increase of 3 upon the number in the previous week, and were 3 above the number in the corresponding week of last year. Ten of the 12 deaths from scarlet fever, and 7 of the 10 referred to "fever," occurred in Glasgow. The 6 fatal cases of diphtheria were fewer than those in the previous two weeks, and included 3 in Glasgow and 2 in Dundee. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 214 and 189 in the previous two weeks, further declined to 152 last week, but were 43 above the number returned in the corresponding week of last year. The causes of 80, or 13 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 31·9, 35·5, and 36·2 per 1000 in the preceding three weeks, was 34·9 in the week ending the 14th inst. During the first six weeks of the current quarter the death-rate in the city averaged no less 33·5 per 1000, the mean rate during the same period not exceeding 22·6 in London and 21·6 in Edinburgh. The 236 deaths in Dublin last week showed a decline of 9 from the number returned in the previous week, and included 20 which were referred to the principal zymotic diseases, against 23, 22, and 18 in the previous three weeks. Of these 20 deaths, 10 resulted from measles, 4 from "fever," 3 from scarlet fever, 2 from whooping-cough, 1 from diarrhœa, and not one either from small-pox or diphtheria. These 20 deaths were equal to an annual death-rate of 3·0 per 1000. The rate from these diseases last week was equal to 2·1 in London and 1·7 in Edinburgh. The fatal cases of measles in Dublin, which had been 3 and 5 in the preceding two weeks, rose to 10 last week. The deaths from "fever" (typhus, enteric, or simple) corresponded with the number in the previous week, while the fatal cases of scarlet fever showed a decline. Three inquest cases and two deaths from violence were registered within the city; and 76, or nearly a third, of the deaths were recorded in public institutions. The 46 deaths of infants exceeded the number in any previous week of this year, while those of elderly persons had declined. The causes of 35, or nearly 15 per cent., of the deaths in the city last week were not certified.

Correspondence.

"Audi alteram partem."

EPIDEMIC INFLUENZA.

To the Editor of THE LANCET.

SIR,—It seems not improbable that England during the coming months may be again visited by epidemic influenza. There are rumours of curious chest attacks, which have affected households with fatal severity. I have heard these illnesses described as epidemic pneumonia; evidently the disease is of a highly contagious character. Within my own knowledge are four families suffering from such contagious chest trouble; and within the past few days I have had another family under my own care, in which the disease assumed such peculiarities as to lead me to infer that I had to deal with true influenza. The facts of the case are as follows:—

On the morning of Saturday, the 31st ult., I was asked to see a child aged fourteen. I learned that on the previous day there had been no indication of illness. The child had gone to bed fairly well, but had passed an extremely feverish, restless night. I first saw my patient at 9 A.M., the symptoms being those of high fever, with a temperature of 103·5°; breathing very rapid and shallow, about 60 to the minute; pulse 140. I could detect no changes in the chest sufficient to account for these grave symptoms, and as far as I could ascertain all the other organs were healthy. I have seen such conditions precede a severe catarrh in children of a neurotic type, and I thought probably such was the case before me. In the evening of the same day, at 5 P.M., all the symptoms were intensified; but in addition there were symptoms of acute fully developed bronchitis, the most extraordinary point being that the expectoration was both copious and purulent, such an expectoration as would be seen after several days of sharp bronchitis. The pulse was still as rapid as in the morning, the breathing more so. The temperature was now 105·5°, the cough incessant, and the tongue covered with thick creamy fur. There was great prostration, but no delirium, the mind being perfectly clear. Physical examination of the chest discovered almost universal bronchitis of the large and small tubes. I should describe it as being more patchy or lobular than is usual; if it had not been so, I fail to see how respiration could have been carried on. During the day two other children in the same house had been seized with a similar attack, though in a less intense form, the extreme fever being perhaps the most marked symptom. On the following morning—that is, within thirty-six hours of the commencement of the attack—in the case of the first child the storm had completely passed. The bronchial irritation had continued until about midnight, when it almost suddenly ceased. The child fell asleep, and passed a good night. At the time of my visit the pulse and temperature were normal, the breathing tranquil, and I could scarcely detect a râle in the chest, a heavily coated tongue, great prostration, and complete loss of appetite being all the traces left of the attack. With the other two children the bronchial attack was not so severe. But in the case of one it was marked and peculiar with regard to its rapid accession and its rapid decline, all stages of acute bronchitis being passed within a few hours, thirty at the most. On the third day one of the children was much troubled with severe earache, which is one of the common sequelæ of influenza. I should also add that during this short illness a dog in the house had an attack of marked bronchial character, and apparently of the same type as that seen in the children.

It is now so many years since England was visited by epidemic influenza, that it would be well for practitioners to be on their guard against its possible advent; the mortality during its last occurrence was terrible. Ten years ago I had a family under my care, and at that time I regarded their highly mysterious illness as caused by influenza. Subsequent knowledge leaves no doubt on my mind that it was a sporadic form. A family of seven children were suddenly struck down by simple continued fever, in each case complicated by some form of chest trouble of a catarrhal character. The fever in each case ran high, and in two the bronchitis was most severe, though not so severe as in the case I have related above. The acute stage passed rapidly off, and was followed in each case by earache, and left that peculiar prostration which I have always understood to characterise true influenza. It is a prostration which reminds one of that following diphtheria, and which suggests a neurotic origin, probably through some poison affecting the pneumogastric. The enfeeblement which follows diphtheria has no direct connexion with the extent of throat trouble, a very slight throat affection being often succeeded by prolonged prostration. As with epidemic influenza, a slight attack may leave the patient miserably weak.

One word as to treatment. I presume no physician of the present day would care to follow the advice laid down by our older writers. The lancet and calomel must be replaced by quinine, brandy, and good nourishing soups. The pyrexia can be at least assuaged by judicious sponging. Under some such treatment, we may trust that, should this formidable enemy again attack us, the mortality will show a marked improvement over that of the last great epidemic, so graphically described by Sir Thomas Watson in his lectures.

I am, Sir, obediently yours,

DONALD W. CHARLES HOOD.

Green-street, Park-lane, February, 1885.

CONGENITAL DISLOCATION OF THE HIP.

To the Editor of THE LANCET.

SIR,—I am reminded of the fable of the wolf and the lamb when Dr. Bennett complains that I have attacked him. I was under the impression that he had attacked me, and that his attack was neither polite nor measured. He introduced my name nine times, misspelt, into his address, and evidently thought that he had, wolf-like, given me the *coup de grâce* when he uttered the words "falls to the ground." Also, he complains that I have perverted ("twisted") his description of the pathological wasting of the gluteus; that I have attributed "nonsense" to him, and have put into his mouth "absurd statements." But I have merely used his own words, and the conclusion is that which naturally arises out of them. He thinks that I have overlooked the word "almost," but he will find that I have quoted him exactly. With your permission I will transcribe the paragraph which he complains that I have mutilated. It runs thus: "The next of the series of theories was that of Ammon—namely, that it was due to arrest of development. That theory naturally suggested itself first, and in dissecting the specimens I have kept it prominently before me, but I see no evidence of arrest of development as the cause of dislocation. The epiphyses and the shaft of the femur are normal, except so far as they have suffered from the effects of the dislocation. The most important theory was that of Guérin, that during fœtal existence some irregularity of nerve action occurred, and the muscles in particular groups became affected for the time spasmodically. Whatever the change was, whether spasmodic action of muscle or simple disorganisation of muscle of any kind, it was followed by retraction of the muscle, and that retraction caused the displacement. In my own cases I have been struck with the destruction of the fibres of the gluteus maximus muscle—indeed, they had almost disappeared in places." Which, being explained and reduced to few words, means this: There is no arrest of development, but retraction following intra-uterine spasm caused displacement of the head of the femur and destruction of the fibres of the gluteus. If there is any other meaning attaching to it, perhaps Dr. Bennett will say how he understands it. He thinks that I overlooked the fact that he exhibited four examples dissected and preserved by Harrison, as well as two of his own. In this address the numbers of specimens are not given, and no single one is described. Notwithstanding his dissections, Dr. Bennett does not formulate a theory; but he has come to a wrong conclusion—namely, that every recorded dissection reveals facts identical with those seen in Hutton's case. He is grand at fault-finding, and scolds, all round; and yet he can only avow his ignorance of the subject.

Dr. Bennett assumes too much; he assumes that I have not made any dissections. Both I and others have made dissections, and some of them are published, and my paper was based on them. Further, he exhibits considerable credulity. Hutton's case is not one of congenital dislocation; but if it were, who would believe that the position of

the displaced head of the femur in a partially paralysed idiot of thirty-one years could be similar to that observed in a young and healthy child, and who would think it fair to draw a comparison between cases so dissimilar, or who would think that "*the true position of the head of the femur*" could be learnt from such a case except Dr. Bennett? It is impossible to discuss the subject on such grounds.

I am, Sir, your obedient servant,

Grosvenor-street, Feb. 14th, 1885. B. E. BRODHURST.

THE DYNAMITE EXPLOSION IN WESTMINSTER HALL.

To the Editor of THE LANCET.

SIR,—The professional interest attaching to the results of injury by explosives induces me to offer the following facts for your acceptance and publication. It is already well known how terrible were the injuries sustained by the two police constables—Coles and Cox, at present under care in the Westminster Hospital—in the fearless exercise of their duty; and it cannot fail to excite the most general satisfaction that the lives of these brave men should have been spared.

My present purpose is to communicate some details respecting the serious injuries received by Mr. Edwin Green, the civil engineer, whose miraculous escape exceeds all natural expectation; indeed, the shattered condition of his hat and clothes can alone convey any adequate idea of the danger he survived.

At the request of the secretary of the Imperial Union Accident Assurance Company (in which office Mr. Green was insured) I visited him on the 30th ult., at his office in Abingdon-street, Westminster. Mr. Whitney, of Great Cumberland-street, had been in professional attendance since the date of the explosion; and, as the report with which I have been courteously favoured by this gentleman is so complete and descriptive, I may be permitted to include it *verbatim* as under:

"I was called to see Mr. Green, at 24, Abingdon-street, on the afternoon of Saturday, the 24th ult., whither he had been conveyed from Westminster Hall a few minutes previously, directly after the dynamite explosion. Prior to the explosion he was standing close to the spot where it took place, fell, and was taken up in a perfectly unconscious state. He was then removed to Abingdon-street. I found him with partially restored consciousness, but with his mind clouded and bewildered, lying on a bed, with little or no power of movement. There were at this time loss of vision, deafness, and bleeding from the right ear. The entire nervous system had evidently suffered a serious and severe concussion. The skin of the face had a curious appearance, not as if covered with fine dust, but of being absolutely dyed with dirt. Half the crown of the hat had been blown away by the explosion, and the clothes very much torn. On opening the front of the shirt the chest and epigastric region presented a large grazed and bruised surface marked with blood, as if a violent blow had been struck by some hard body of considerable size. In a few minutes the patient felt sick and vomited a large quantity of dark, clotted blood, mixed with portions of food. These vomits were repeated at intervals of a few minutes, still in considerable quantities, and then followed coughing and spitting of bright-red, frothy blood from the bronchial tubes and lungs. This hæmorrhage was a source of much anxiety, but, by a constant supply of ice and the administration of lead, was gradually subdued. It has not recurred. With the aid of a good constitution, unremitting care, and excellent nursing, he has made gradual and steady progress towards recovery. The disturbed functions are all steadily improving, the damaged visual and locomotive powers being last in the train of recovering organs. But vision, though improving, is yet wholly unfit for practical and professional purposes.

"Feb. 5th, 1885. W. A. WHITNEY, M.R.C.S.

Mr. Whitney, in a subsequent letter, says: "I was forcibly struck with the apparent power of the lead in arresting the hæmorrhage; and I may add (which I did not mention in the report) that the administration of Easton's syrup from the date of Jan. 31st has been as obviously beneficial in helping to restore the locomotive power and to remove the paralysing effects of the nervous concussion."

In the last report, dated Feb. 14th, I was gratified to hear that "Mr. Green went home on Tuesday last, and is going on capitally."

Further comment by me is unnecessary.

I remain, Sir, yours faithfully,

J. HERBERT STOWERS, M.D.

Finsbury-circus, E.C., Feb. 1885.

THE CASE OF DR. DAVID BRADLEY.

To the Editor of THE LANCET.

SIR,—I have pleasure in informing you that I have been able to secure 166 signatures, of practitioners resident in Birmingham, to a memorial to be presented to the Home Secretary in favour of a reconsideration of the verdict in Dr. Bradley's case. At the Birmingham Midland Counties Branch of the British Medical Association held last Thursday, the following resolution was proposed by myself, seconded by Dr. E. B. Whitcombe, Superintendent of the Borough Asylum, and unanimously carried:—

"That this meeting having heard a statement of the case of Dr. David Bradley, recently convicted of felonious assault at the Leicester Assizes, desires to express its opinion that the case is eminently one in which a reconsideration of the verdict of the jury is demanded. This opinion is based upon a consideration of the following facts: First, that the complainant has been admittedly the subject of epileptic fits since childhood; secondly, that such persons are specially liable to be subject to erotic delusions during and after a seizure. It is therefore of the utmost importance that the corroborative evidence in such a case should be decisive, whereas in the case of Dr. Bradley it seems to be singularly defective."

I am, Sir, yours truly,

The Crescent, Birmingham, Feb. 16th, 1885. LAWSON TAIT.

To the Editor of THE LANCET.

SIR,—Having been at Leicester Assizes in November last, and heard the whole of the evidence given in the above case, I shall be glad if you will allow me a small space in your journal to give you the result of some investigations I have made at the house on Whittington Moor, where the offence was alleged to have taken place. I went over there on the 14th inst., accompanied by Mr. Reginald Naylor, an architect of this town, who has kindly taken a plan of the rooms, which can be produced at any future investigation if necessary. The house is situated about the centre of a terrace of small dwellings, and has its front entrance opening *direct* into a parlour, which is 12 ft. square, and has a low bay window. This room was used by Dr. Bradley as a branch surgery, and here it is alleged the offence was committed. It is divided from the kitchen by a space of 2 ft. 8 in., containing the staircase. Between the parlour and kitchen are two badly fitting 1¼ in. doors, with panels about ⅜ in. thick. With both of these doors fastened we were able to hear conversation going on in the kitchen, and also the rattling of knives and forks whilst the inmates were at dinner. The parlour is separated from the cellar beneath by a plain one-inch boarded floor resting on joists, and conversation going on in the parlour could be distinctly heard in the cellar. During the whole of the time that Dr. Bradley and the prosecutrix were in the parlour together the woman who occupied the house was either in the kitchen or cellar, and yet she heard none of the screaming. The woman's husband was ill in bed in the room immediately over the parlour, where the voices of anyone in ordinary conversation can be distinctly heard, and yet he heard no screaming. Two women were about three yards from the front door, which was proved at the trial to be about one foot open, and yet *they heard no sound*. With the front door shut I was able to hear distinctly a child across the street playing with a shuttlecock and battledore. The architect admitted that he never saw such flimsily-built houses, and that any screaming must have been heard in the houses on either side, in the cellar below, and the bedroom above the parlour.

In conclusion, allow me to say that I know nothing of Dr. Bradley, and never saw him until he was in the dock.

I am, Sir, yours faithfully,

Friar Gate, Derby, Feb. 1885. GEORGE RICE, M.R.C.S.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

To the Editor of THE LANCET.

SIR,—I should be much obliged by your allowing me to correct an erroneous statement in THE LANCET of last week, in the report of the discussion on Mr. Davy's paper at the Medical and Chirurgical Society on "The Radical Cure of Club-foot" by osteotomy—i.e., the removal of a large wedge of bone from the tarsus. I am reported to have said that "Mr. Lund's operation"—removal of the astragalus—"interfered with the movements of the ankle-joint." What I did say was that Mr. Lund's operation dealt only with the ankle-joint, but free motion at this joint was obtained by removal of the astragalus; and at the present time, in the case operated upon by Mr. Lund ten years ago free motion still exists. Mr. Davy's operation dealt only with the transverse tarsal joint, leaving the ankle-joint, in severe cases, in a state of immobility with an elevated os calcis. Treatment should be directed against both these great centres of motion, which are of equal importance in the production and cure of the deformity.—I am, Sir, yours obediently,

Henrietta-street, W., Feb. 17th, 1885. WM. ADAMS.

BIRMINGHAM.

(From our own Correspondent.)

THE GENERAL HOSPITAL.

THE annual meeting of the governors of this hospital was held on the 18th inst., when the committee presented their 105th annual report, with a statement of the receipts and expenditure for the year ending Dec. 31st, 1884. From the tables given it is seen that the large number of 47,560 patients were treated at the hospital in the year 1884, 3451 of these being in-patients; and of the total number 31,302 were free cases, attended to without tickets. The ordinary income of the year exceeded that of 1883 by £528. Of this excess £200 was due to an increased subscription list, a fact which, considering the general depression in trade, shows the high estimation in which the charity is held. The ordinary expenditure was £285 less than that of the last year, chiefly owing to a decrease in the number of in-patients; but the total expenditure has been increased by the outlay of £103 in the chapel, which greatly needed renovation and repair. The general account shows that the year ends with a deficiency of £3620, which the committee trust the liberality of the public will make good. Fitting eulogies were passed to the working staff of the hospital, and the prospects for the future were predicted as being highly encouraging.

THE LYING-IN CHARITY.

The annual meeting of this charity was held on the 12th inst., and was well attended. The committee's forty-second annual report pointed out that the work done had been eminently sound, and was progressing satisfactorily, the system of attending the patients exclusively at their own homes being followed by marked success. The number of patients attended during the year was 964, against 870 in the previous year, among whom there has been only one death, from puerperal convulsions, an extremely small percentage as compared with the Registrar-General's returns of the ordinary mortality in such patients. The number of children stillborn was 33, the number of deaths of children 47. Sixteen of them occurred during the ten days that the mothers were under the charge of the midwives, and the remaining 31 happened afterwards—between the ten days and the date of the midwives' last call, thirty days after delivery. The financial condition of the charity was shown to be favourable. An important work is done by its means among the necessitous poor, the tickets being much sought and highly valued by the recipients. The figures show the enormous advantage gained by attendance upon the patients at their own homes, as contrasted with the former plan of aggregation in one building, thus confirming the opinion expressed by the best authorities of the lessened risk afforded by this system.

THE DENTAL HOSPITAL.

The twenty-fifth annual report of this useful institution has just been issued. The number of patients treated in the year was 7535, against 5672 in the preceding year, the increase being due mainly to the number of cases being sent from the General Hospital. This influx, though represented by numbers, does not carry a corresponding amount of funds with it, a matter of some regret to the authorities of the hospital. Anæsthetics were administered during the year in sixty-two cases, the greater number being nitrous oxide gas, which is necessarily a costly article for general use. An appeal is made for an increase in the number of subscribers, who yield the present income of £191, while the expenditure amounted to £134.

IRELAND.

(From our own Correspondent.)

PROPOSED AMALGAMATION OF SOME OF THE DUBLIN HOSPITALS.

THE deputation which lately had an interview with Earl Spencer were divided as regarded the advisability of amalgamation, some being in favour of the scheme and others indifferent or antagonistic. Of the £15,723 annually distributed, some valuable institutions receive a very small quota; for example, St. Mark's Ophthalmic Hospital but £100, Coombe Lying-in Hospital £200, and the Hospital for Incurables £250. The Westmoreland Lock Hospital does good service for its grant of £2600, also Steevens' Hospital with £1300, and the House of Industry Hospitals with £7400, while Cork-street Fever Hospital receives £2500. If the latter institution could be amalgamated with the Hardwicke Fever Hospital, it would be a desirable proceeding. Clinical instruction, which should be a *sine qud non* in institutions of this kind, is altogether absent in Cork-street Hospital; and further, its affairs are altogether managed by a lay committee, the majority of whom seldom, if ever, attend the meetings of the Board. As regards the proposal to form another medical school, the suggestion is perfectly absurd, there being at present too many institutions of the kind in Dublin, and adding another to the number would not be a desirable proceeding. What the Government will do it is difficult to say, but they appear to be strongly in favour of the amalgamation of some of the more important institutions which receive grants from Parliament.

ROYAL UNIVERSITY OF IRELAND.

The Senate have approved of certain changes in the courses in medicine, to come into operation next year, and have reappointed for another year the following examiners:—In Medicine, Stephen M. MacSwiney; in Midwifery, John A. Byrne and H. M. Jones; in Materia Medica, F. B. Quinlan and J. Seton Reid; in Medical Jurisprudence, Edmund W. Davy and Michael McHugh. The Senate have also adopted the following resolutions:—"That all graduates of the University who at present hold the diploma in Obstetrics be admitted to the degree of M.A.O. upon making application and complying with certain conditions." "That after the year 1885 credit will not be given to any candidate for Botany and Zoology at the first examination in Medicine upon the ground of having passed any Arts examination in which the subjects were comprised." The diploma in Sanitary Science has been conferred upon Dr. John Roche.

ARTERIAL ANOMALY AND MALPOSITION OF RIGHT KIDNEY.

In a subject brought into the Ledwich School of Medicine, Dublin, for dissection last week, a very rare arterial anomaly was found. The right renal artery came off at the bifurcation of the abdominal aorta into the common iliacs, and passing downwards was attached to the right kidney, which lay in the pelvis behind the bladder. The organ was about one-third the normal size, while the artery supplying it was about the size of the profunda femoris. This malposition of the kidney is an extremely rare occurrence, and therefore worth recording.

NATIONAL ORTHOPÆDIC AND CHILDREN'S HOSPITAL, DUBLIN.

It is satisfactory to learn from the ninth annual report that this institution is now out of debt and has a fair balance to its credit. This happy result was due, to a great extent, to a very successful bazaar held last December. The hospital has been amalgamated with the Pitt-street

institution, the first one of its kind established in the United Kingdom in 1821, exclusively for the treatment of children's diseases. It was founded by Sir Henry Marsh and Dr. Charles Johnson, and since then the staff has included Dr. Stokes, Sir P. Crampton, Mr. Cusack, Dr. William Moore, &c. Preliminary steps are being taken to secure plans and a suitable site for the building of a hospital for the ailments and deformities of children.

Dr. Levis, who contended that he was duly elected last November as medical officer of Skibbereen dispensary, and brought the matter into court, has this week, in an action against the guardians, established his right to the appointment.

Dublin, Feb. 17th.

PARIS.

(From our Paris Correspondent.)

CARDIAC HYPERTROPHY IN ADOLESCENTS.

PROFESSOR GERMAIN SÉE lately submitted a paper to the Academy of Sciences on Cardiac Hypertrophy occuring in Youth, or during the process of the growth of the body. He endeavours to make out that this hypertrophy is merely the result of growth, and not of any morbid influence, consisting as it does in a simple increase in the numerical strength of the primitive fibrillæ of the heart, or, in other words, in the hypernutrition or hypersarcosis of that organ, accompanied with dilatation. There is, moreover, no fatty or fibrous degeneration, nor are the coronary arteries sclerosed, as is the case with hypertrophy resulting from disease. It is, however, difficult to say whether the lesion in question consists in true hypertrophy or in simple dilatation of the heart, as it generally disappears with the cessation of growth of the other parts of the body. Professor Sée founded the subject of his thesis on eighty individuals, thirty of whom were youths aged from eight to sixteen years, and the others from sixteen to twenty-one, all being in other respects in a perfectly normal condition. In another class of cases—that is, in young recruits aged from seventeen to twenty, and who presented themselves for certificates for volunteer service—he found a great number who were the subjects of functional troubles or manifest lesions of the heart, as verified by auscultation and percussion. Professor Sée seemed to look upon this condition as almost normal in youth, and on that account did not consider that it incapacitated young men for military service. MM. Vulpian and Larrey, however, who had to report on the paper, did not take this view of the case, as they considered that hypertrophy of the heart, being an abnormal condition, is incompatible with the exigencies of military service. This opinion was emphasised by Baron Larrey from personal experience of many years, and he stated that, as it would be impossible to say whether the cardiac hypertrophy would or would not disappear at the cessation of the growth of the individual, as suggested by Professor Sée, he considered it advisable to reject the recruits who presented such a condition.

MM. CORNIL AND ROBIN.

According to a law recently passed in the French Parliament concerning the elections to the Senate or to the Chamber of Deputies, no member of either body can at the same time hold any other official appointment under Government. Professors Charles Robin and Cornil, who have been recently elected as Senators, will have to choose between the Senate and the respective chairs they now occupy at the Paris Faculty of Medicine, the former as Professor of Histology and the latter as Professor of Morbid Anatomy. It is anticipated that M. Robin will retire from his professorial chair; and it remains to be seen what will be the decision of M. Cornil, who is regarded as the favoured candidate for the Professorship of Histology.

MEDICAL HONOURS.

Among the list of the decorations of the Legion of Honour recently conferred by the President of the French Republic, I find the names of Dr. MacGavin and Dr. Walter Douglas Hogg, who were created Chevaliers of that Order for "exceptional," and I may add meritorious, services. Dr. MacGavin has been many years in practice in Paris, and Dr. Hogg is the son of the highly respected pharmacien of that name who has been established in this city for nearly thirty-five years.

Paris, Feb. 18th.

THE SERVICES.

THE EGYPTIAN EXPEDITION.

Classes for ambulance drill are to be formed amongst officers and men on board the transports.

Surgeon-General Oliver Barnett has been appointed Principal Medical Officer in command of the Medical Staff and Army Hospital Corps about to be despatched to Suakim.

Brigade Surgeon Hinde, Principal Medical Officer of the South-Eastern District at Dover, was to sail on Tuesday from Portsmouth.

Quartermaster F. Thompson, Medical Staff, is ordered to Aldershot to prepare for embarkation to Suakim.

Surgeon-Major Evatt, M.D., Medical Officer to the Royal Military Academy, Woolwich, has been ordered to hold himself in readiness to sail for Egypt.

There is no foundation for the report that the Government has sent a circular to the leading medical schools of the country asking students to volunteer as dressers for the Soudan campaign.

Drs. Reed and Alexander, with a detachment of the Army Hospital Corps, on the 18th took up their berths in the *Ganges*, which has been chartered for service as a hospital ship.

The medical officers finally appointed to the 3rd Battalion of Guards are Surgeon-Major Lawrence, Surgeon Fenn, and Quartermaster Tedding.

Orders have been received at Aldershot for the concentration at that station of another detachment of the Medical Staff Corps for service in the Soudan.

On the 17th inst. the 1st Bearer Company, the 1st and 2nd Field Hospitals of the Medical Staff Corps, besides details of the Commissariat and Transport Corps, under orders for the Soudan, proceeded by special trains from Aldershot to Southampton, where they embarked in the steamer *Arab* for conveyance to Suakim.

Colonel Loyd-Lindsay, Chairman of the National Society for Aid to the Sick and Wounded in War, states that the Society has again been in communication with Lord Wolseley and with the authorities at home, and it is now equipping an expedition which will go to Suakim under the charge of Mr. V. Barrington Kennett as its representative in that district, with a staff of surgeons and a liberal supply of comforts and medical appliances. The intention is to form stations for the relief of sick and wounded men along the lines of communications. In this the Society is acting in entire accordance with and under the advice of Dr. Crawford, the Director-General of the Army Medical Department.

WAR OFFICE.—Royal Horse Guards: Surgeon James Stevenson Forrester, from the Medical Staff, to be Surgeon, vice W. Maunsell-Collins, M.D., retired.

INDIA OFFICE.—The Queen has approved of the retirement from the service of the following officers of Her Majesty's Indian Military Forces:—Brigade Surgeon William Payton Partridge, of the Bombay Army; Brigade Surgeon William Henry Kirton, of the Bengal Army.

The following officers are granted a step of honorary rank on retirement:—Deputy Surgeon-General John Edward Tuson, M.D., of the Bengal Army, to be Surgeon-General; Surgeon-Major Rivers Mantell, of the Bengal Army, to be Brigade Surgeon.

ADMIRALTY.—Fleet Surgeon Adam Brunton Messer, M.D., has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets in Her Majesty's Fleet. The following appointments have been made:—Staff Surgeon Richard A. Mowll, M.D., to the *Nankin*; Surgeon Herbert W. A. Burke, to the *Excellent*; Fleet Surgeon William G. Ridings, to the Royal Marine Artillery, Portsmouth.

RIFLE VOLUNTEERS.—2nd Volunteer Battalion, the Queen's Own (Royal West Kent Regiment): Honorary Assistant-Surgeon Robert Nathaniel Mitchell, M.D., resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the battalion on his retirement.—2nd Volunteer Battalion, the Lancashire Fusiliers: Lieutenant William Pooley is appointed Acting Surgeon.—12th Middlesex (Civil Service): Walter Robert Tytheridge, Gent., to be Acting Surgeon.—1st Volunteer Battalion, the Queen's (Royal West Surrey Regiment): Acting Surgeon Charles William Philpot, M.D., to be Surgeon.

LADY LEE has given the sum of £200 to the funds of the Maidenhead Cottage Hospital.

Medical News.

COLLEGE OF PHYSICIANS IN IRELAND.—At the February examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Berkeley Joseph Acheson, Francis Forster Brady, George Arthur Hawkins-Ambler, Julian Sewell Hayes, John Keenan, Denis Patrick Kenna, Francis Ignatius Maunsell, Sampson Roch, John Thomas Walsh.

MIDWIFERY.—W. J. Cawden, H. S. Fairbank, Lawrence B. P. Fernandez, George Arthur Hawkins-Ambler, John Keenan, D. P. Kenna, Francis Ignatius Maunsell.

The undermentioned were admitted Members:—
Thomas Vesey Bell. | Michael Joseph Yourrell.

UNIVERSITY OF DUBLIN.—At a meeting of the Senate held this week the following degrees were conferred:—

BACHELOR IN SURGERY.—John Blacker Buchanan, Henry Augustus Ellis, Samuel Handy Halahan, William Lacy Hickey, Joseph Ewing Miller, James John O'Donnell, Daniel R. O'Sullivan, George Raymond, William Richardson Rice, Rowland Hill Scovell, Walter John Slaughter, John James Carl Watson.

LICENTIATE IN SURGERY.—Joseph Vincent Manning.

BACHELOR IN MEDICINE.—Edward J. Farmer, Samuel Handy Hallahan, Robert Kerr Johnston, Robert Travers, Lewis Arthur Henry Meeke, Joseph Ewing Miller, Robert John Montgomery, James John O'Donnell, George Raymond, Walter John Slaughter.

DOCTOR IN MEDICINE.—Alexander James Boyd, Richard Alfred Lett, Arthur Henry Meeke, Victor Edwin Smith, Charles Herbert Thompson, William McDowell Aikin Wright (stip. cond.).

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 12th inst.:—

MacGillycuddy, Niell, University College.
Maude, Arthur, St. Bartholomew's Hospital.

THE Society for the Total Suppression of the Sunday Sale of Liquor has just held its annual meeting in Manchester. The income had amounted to £2840 during the year.

MEDICAL MAGISTRATE.—Mr. G. Booth, M.R.C.S., has been placed on the Commission of the Peace for the borough of Chesterfield.

AT a meeting held at Hastings on the 17th inst., to receive the annual report of the Local Sanitary Aid Association, the committee reported the continued progress of the organisation.

ROYAL COLLEGE OF SURGEONS.—Professor Treves will commence his course of lectures on the Anatomy of the Peritoneum and Intestinal Canal in Man on Monday, the 23rd inst., in the theatre of the College.

HOSPITAL SATURDAY FUND.—Mr. Samuel Morley, M.P., has been unanimously re-elected President of this fund for the ensuing year; and the names of the Rev. C. H. Spurgeon and Mr. B. Lucraft have been added to the list of Vice-Presidents.

PRESENTATION.—Dr. J. W. Mathews, of Kimberley, has been presented by the Mussulmans of that place with a silver cup and an address, as a mark of respect and admiration for his outspoken defence of the rights and liberties of Mahomedans during the late epidemic.

PURIFICATION OF TOWN SEWAGE.—A deputation from the North of France, who are now in England with the object of ascertaining the best mode of treating town sewage and the purification of rivers, visited on the 16th inst. the sewage works at Mode Wheel belonging to the Corporation of Salford, to which the visitors gave unqualified praise. The deputation afterwards proceeded to Glasgow.

ST. JOHN AMBULANCE ASSOCIATION.—Rooms at the Mansion House have been placed at the disposal of the City and Port of London executive of the St. John Ambulance Association, to hold afternoon classes for the benefit of *employées* in offices and business establishments. Two of the five classes meeting at Lady Brassey's house have been examined by Mr. R. Bruce, M.B., and Deputy Inspector-General M. Coates, R.N.

ROYAL FREE HOSPITAL.—At the fifty-seventh annual general court of the governors of this hospital, held on the 12th inst., it was stated that the receipts from all sources during the past year had amounted to £15,772, and the expenditure to £11,590, there being a balance of about £3000 to the credit of the institution. During the year 22,736 persons were treated, of which number 20,816 were out-patients. The daily average of in-patients in the wards was 136.

THE GUILD OF ST. LUKE THE PHYSICIAN.—At a large gathering of the members of this Society, held on the 18th inst. at the rooms of the Medical Society, Chandos-street, Dr. Wynn Westcott, the Deputy Coroner for Central Middlesex, delivered, by request, a lecture on "Suicide, its Causes and the best Means of Prevention." The lecture was well received, and will be published in the monthly periodical of the Guild. Mr. Cowell, F.R.C.S., of the Westminster Hospital, was the chairman of the meeting.

SOUTH DEVON AND EAST CORNWALL HOSPITAL.—The annual general meeting in connexion with this institution was held on the 3rd inst., when the remainder of the new building, part of which was formally opened some time ago, was declared complete. The new hospital is built on the pavilion system, and is in most respects modelled after the Edinburgh Infirmary. Accommodation is afforded for 120 patients, with an average of 1700 cubic feet of space for each. The receipts during the past year amounted to £3775, and the expenditure to £3675. The number of in-patients was 750, and of out-patients 1988.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At a recent meeting of this Association the discussion on Dr. Hope's paper on Infantile Diarrhœa, read at the previous meeting, was continued by Drs. Vacher, Samelson, Barr, Ashworth, Kenyon, and Mr. Corbett. Dr. Kenyon read some notes on the subject of revaccination, and a memorial to the Local Government Board, prepared by Dr. Vacher, was adopted. Mr. Fred. R. Hawxby, B.A., architect, afterwards described a plan which he had adopted of heating and ventilating houses, the principal features of the scheme being those advocated by Drs. Drysdale and Hayward of Liverpool—viz., the admission to the house of an ample supply of fresh air, and the extraction of the vitiated air by means of the waste heat of the kitchen fire. The arrangement has been already applied by Mr. Hawxby in a house erected by himself, and is reported to work satisfactorily.

MERCER'S HOSPITAL, DUBLIN.—At a recent meeting of the past and present students of this hospital, resolutions to the following effect were carried:—1. That the recent alterations in the working of the hospital are calculated to interfere greatly with the surgical practice and teaching of the institution, and that they are unnecessary. 2. That the post of house-surgeon being an annual one, and open to all students of the hospital qualified to fill it, the action of the medical board in filling the post for the ensuing year without notifying the vacancy to the students by advertisements or otherwise is most arbitrary and unfair. 3. That the system of not admitting patients unless upon the joint order of two lay or two medical governors is absurd. 4. That it is absolutely necessary that some steps be taken by the board to enable the medical and surgical staff to give proper clinical lectures. 5. That should any reduction in the number of admissions to the hospital be made, such reduction should in no way curtail the right of the senior surgeon for the time being to a larger proportion of beds than any other member of the staff.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ARDUCKLE, HUGH WIGHT, M.D.Aber., L.F.P.S.Glas., L.R.C.P.Ed., has been appointed Medical Officer for the Stamford District and Workhouse, Thorne Union.

BLUMER, W. PERCY, F.R.C.S.E., has been appointed Honorary Surgeon to the Sunderland and North Durham Eye Infirmary, vice E. Allan Maling, M.R.C.S., J.P., resigned.

GELSTON, JOHN SEYMOUR, L.K.Q.C.P.I., L.R.C.S.I., has been appointed House-Surgeon to the Doncaster Infirmary and Dispensary, vice Marshall, resigned.

GREEN, C. D., M.B., M.R.C.S., L.R.C.P., has been appointed House-Surgeon to St. Thomas's Hospital.

HARRIS, THOMAS, M.D.Lond., has been appointed Assistant Lecturer and Demonstrator in Pathology at the Owens College, Manchester, vice Robert Maguire, M.D.Lond., M.R.C.P., resigned.

HILL, G. W., B.Sc., L.S.A.Lond., has been appointed Medical Officer for the St. Just District of the Truro Union, vice Harden, deceased.

HUBBARD, FREDERICK EDMUND, L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Fifth District of the Depwade Union, vice Rose.

HULL, WALTER, M.B., M.R.C.S., L.R.C.P., L.S.A.Lond., has been appointed House-Surgeon to St. Thomas's Hospital.

JOHNSTON, G. D., M.R.C.S., L.R.C.P., has been appointed Resident Accoucheur to St. Thomas's Hospital.

LANKESTER, H. H., M.R.C.S., L.S.A.Lond., has been reappointed Non-resident House-Physician to St. Thomas's Hospital.

LEE, CHARLES G., M.R.C.S., L.R.C.P.Lond., has been appointed Honorary Surgeon to the Liverpool Eye and Ear Infirmary, vice T. Shadford Walker, M.R.C.S., appointed Honorary Consulting Surgeon.

MACKENZIE, H. W. G., M.A., M.B., M.R.C.S., has been appointed Resident House-Physician to St. Thomas's Hospital.

MARRINER, W. H. LISTER, M.B., M.R.C.S., L.S.A.Lond., has been reappointed Clinical Assistant in the Department for Diseases of the Throat at St. Thomas's Hospital.

MIDDLETON, LUCAS ALFRED, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Harbourne District of the King's Norton Union, vice Smith.

PLOWMAN, S., M.R.C.S., L.S.A.Lond., has been reappointed Clinical Assistant in the Departments for Diseases of the Skin and Ear at St. Thomas's Hospital.

PRIEST, J. DAMER, M.R.C.S. & L.S.A.Lond., has been appointed Acting Surgeon to the War Department Royal Gunpowder Manufactory, Waltham Abbey. Also Certifying Factory Surgeon, and Surgeon to the N Division of the Metropolitan Police.

PULLAN, H. W., L.F.P.S.Glas., M.R.C.S., has been appointed Medical Officer for the Belton District of the Thorne Union.

RELTON, BERNARD, M.R.C.S., L.S.A.Lond., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

ROBINSON, H. B., M.R.C.S., L.R.C.P., has been appointed Resident House-Physician to St. Thomas's Hospital.

SAKEYOSHI, Y., M.R.C.S., L.R.C.P., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

STEWART, JAMES PICKERING, M.B., C.M.Glas., has been appointed Medical Officer for the Gosberton District of the Spalding Union, vice Swan.

WHITE, SINCLAIR, M.D., M.Ch.Q.U.I., F.R.C.S.Eng., has been appointed Medical Officer of Health for the Sheffield Urban Sanitary District, vice Whitgreave.

WILLIAMS, R. M., M.R.C.S. L.R.C.P., has been appointed Assistant House-Physician to St. Thomas's Hospital.

Births, Marriages, and Deaths.

BIRTHS.

FRASER.—On the 14th inst., at Melville-street, Edinburgh, the wife of Dr. Thomas R. Fraser, F.R.S., Professor of Materia Medica in the University of Edinburgh, of a son.

SMYTH.—On the 12th inst., at Holly Lodge, Brockley, S.E., the wife of F. Sydney Smyth, L.R.C.P.Ed., F.R.C.S.Ed., of a son (stillborn).

STEWART.—On the 13th inst., at Poona, the wife of Surgeon Alex. K. Stewart, of H.M.'s Indian Medical Service, of a son.

WILSON.—On the 10th inst., at The Cedars, Kenninghall, Norfolk, the wife of J. H. Wilson, M.R.C.S., of a son.

WRIGHT.—On the 15th inst., the wife of Francis Jas. Wright, M.D., of Northumberland House, Finsbury-park, N., of a son.

MARRIAGES.

BRADBURY—GWATKIN.—On the 12th inst., at Holy Trinity Church, Twickenham, J. B. Bradbury, M.D., of Cambridge, to Jane, elder daughter of the late Rev. R. Gwatkin, B.D., formerly Fellow and Tutor of St. John's College, Cambridge, and Vicar of Barrow-on-Soar, Leicestershire.

CARTER—BEAUMONT.—On the 12th inst., at Chudleigh, Devon, by the Rev. Walter Moyle, M.A., cousin of the bride, assisted by the Rev. Theophilus Bennett, M.A., S. E. Carter, Esq., M.D.Lond., to Edith Cecilia, youngest daughter of the late Col. Wm. Beaumont, of Her Majesty's Indian Army, and of Fairfield, Chudleigh, Devon.

MCWHINNIE—HIGGINBOTHAM.—On the 11th inst., at St. Mary's Church, Ealing, John McWhinnie, Staff Surgeon R.N., to Harriet, widow of the late Thos. Higginbotham, of Barnfield, Alderley Edge, Cheshire.

MILL—BROOKS.—On the 14th inst., at St. Matthew's, Denmark-hill, by the Rev. C. E. Jones, William Mill, M.R.C.S., L.R.C.P., of Halford, to Etty Frederica, youngest daughter of the late Wm. Brooks, Denmark-hill, S.E.

MUNRO—COOKE.—On the 17th inst., at St. Andrew's, Newcastle-on-Tyne, A. Campbell Munro, M.B., D.Sc., South Shields, to Emily Isabel, daughter of the late Richard Cooke, Woodford, Essex.

DEATHS.

FRANKLIN.—On the 12th inst., after two days' illness, at Liverpool-road, Hy. Franklin, L.R.C.P.Ed., late of St. John's-street, Clerkenwell.

GOUGH.—On the 16th inst., at Epsom, Sergeant D. Gough, in his 67th year, for twenty-seven years drill-master at the Royal Medical College, Epsom.

LEWIS.—On the 6th inst., at Davos, Switzerland, George Stephens Lewis, Surgeon Army Medical Staff, late of Alexandria, Egypt.

MARTIN.—On the 13th inst., at Alexander-square, South Kensington, James Johnstone Martin, Fleet Surgeon R.N., aged 63.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, February 19th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Feb. 13	30·03	W.	49	47	...	52	46	...	Overcast
,, 14	29·74	W.	49	47	...	52	47	...	Overcast
,, 15	29·54	S.W.	50	48	...	52	45	·19	Overcast
,, 16	29·32	S.W.	51	50	...	52	49	·35	Raining
,, 17	29·32	S.E.	42	41	...	45	40	·57	Raining
,, 18	29·58	N.W.	38	36	...	45	35	·08	Cloudy
,, 19	29·79	W.	34	33	...	45	31	...	Foggy

Medical Diary for the ensuing Week.

Monday, February 23.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M. each day, and at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

MEDICAL SOCIETY OF LONDON.—Dr. Felix Semon: Electric Illumination of different Cavities of the Human Body (mouth, pharynx, larynx, nose, ear, vagina, rectum), Faradisation, Galvano-Cauterisation, and Electrolysis, by means of Pocket Accumulators chargeable at home.—Mr. Hurry Fenwick: Cocaine in Vesico-urethral Practice.

Tuesday, February 24.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 P.M., and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M., and on Fridays at 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M., and on Saturday at the same hour.

ROYAL INSTITUTION.—3 P.M. Prof. S. Colvin: Museums and National Education.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. Ormerod: Hereditary Locomotor Ataxy (cases will be exhibited to illustrate Dr. Ormerod's paper).—Dr. Samuel West: Fatal Hæmoptysis, the statistics of the last fifteen years of the Chest Hospital, Victoria-park, with Remarks upon Profuse Non-fatal Hæmoptysis.

Wednesday, February 25.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour. Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

HUNTERIAN SOCIETY.—Dr. Pye-Smith: Presidential Address.—Dr. Stephen Mackenzie: The Connexion between Erythema Nodosum and Rheumatism.

Thursday, February 26.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL COLLEGE OF PHYSICIANS.—5 P.M. Dr. William Osler: Endocarditis (Gulstonian Lecture).

ROYAL INSTITUTION.—3 P.M. Prof. Dewar: The New Chemistry.

Friday, February 27.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

QUEKETT MICROSCOPICAL CLUB.—8 P.M. Mr. Buffham: The Conjugation of Rhabdonema Arcuatum (Küts).

CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Hughes-Bennett: A Case of Locomotor Ataxy without any Disease of the Posterior Columns of the Spinal Cord.—Dr. Seymour Taylor: A Case of Arrested Rickets.—Mr. Charters Symonds: A Case of Nephro-lithotomy.—Mr. Henry Morris: A Case of Nephro-lithotomy.—Dr. Hadden: A Case of Obliterative Disease of Vessels (living specimen).

ROYAL INSTITUTION.—9 P.M. Prof. E. Ray Lankester: A Marine Biological Laboratory.

Saturday, February 28.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Mr. C. Armbruster: Richard Wagner.

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE INDEX MEDICUS DISCONTINUED.

WE regret to observe that a notice accompanies the annual index which completes the sixth volume of the Index Medicus, informing subscribers to that publication that it will with that issue cease to be published. The late Mr. Leypoldt, the publisher, regarded the undertaking with particular favour; and his successors, who are managing his estate and business enterprise, have made strenuous, but futile, efforts to secure the subscriptions necessary to place the Index Medicus on a self-supporting basis.

Mr. W. Dobson (Leeds).—The announcement appeared in our last number, page 299.

KING AND QUEEN'S COLLEGE OF PHYSICIANS, IRELAND.

To the Editor of THE LANCET.

SIR,—In these days of medical reform it has been a matter of surprise to me that it has not been suggested to alter the name of the King and Queen's College of Physicians to that of Royal College of Physicians. There are many reasons in favour of such an alteration, and none that I know of against such a change. For the former the following arguments may be advanced:—1. The public recognise the letters "L.R.C.P.," understand their value, and know what they represent. The letters "L.K.Q.C.P.I." to most outside the profession are utterly unintelligible. 2. The advantages of simplification and uniformity in the designation of medical qualifications. 3. The boon conferred on all who hold the diploma of the College in being enabled to place letters after their names that will represent something to the public beyond hieroglyphics. As a case in point, a medical friend (a L.K.Q.C.P.I.) informs me that he is going in for another medical qualification, as he considers the ambiguity of these letters detrimental. For the same reason I have recently written to the Royal College of Physicians, London, with a view of passing the necessary examination to obtain their licence, though I am a M.K.Q.C.P.I., feeling the same might be an impediment should I enter into civil life either at home or abroad.

I appeal, Sir, to you, that through the aid of your powerful journal this subject may have due consideration, as I feel sure those who hold the diploma of the College must see the advisability of such a change.

I am, Sir, yours faithfully,

Feb. 16th, 1884. SURGEON, R.N.

Mr. Alfred Drysdale (Mentone) is thanked; but the publication of the letter would hardly be agreeable, we think, to the surviving relatives of the deceased gentleman.

Subscriber could not certify. He might express an opinion.

EFFECTS OF EXCESSIVE CIGARETTE SMOKING.

To the Editor of THE LANCET.

SIR,—I have a patient, aged forty, subject to chronic pharyngitis, kept up by excessive cigarette smoking. His general health is good, and all the symptoms are easily recognisable, except one which I have never seen myself nor heard described by others—viz., that once, and sometimes twice, a day, without any special effort, he expectorates a vermiform substance, about a quarter of an inch long and one-sixteenth of an inch thick, tough in substance, and of a nauseous taste, though not odorous. It appears to me like a combination of mucous and sebaceous matters secreted in one of the minor conduits and moulded by the latter into its shape. Can you or any of your readers enlighten me on a subject of which I am fain to confess my ignorance?

I am, Sir, your obedient servant,

London, Feb. 16th, 1885. M.D.

Mr. A. Glover Williams will get the name of the secretary and other particulars by inquiring of the Charity Organisation Society.

"ALL FOR THE SAKE OF A DOCTOR."

THE *Kentish Independent* comments on Mr. Spear's report to the Local Government Board in a leading article with the above heading. Our contemporary thinks that Woolwich is to be congratulated on its unique position amongst English towns in not being compelled to appoint a medical officer of health. He even claims to echo the voice of local medical opinion, for he says: "The authorities ..... have a system, which they think a good one, by which all the practitioners of the district form a sort of volunteer corps of medical officers, such practitioners, with few exceptions, preferring this to the other alternative of a parish doctor poking his nose into their cases, and possibly meddling with their patients." We are quite unable to understand how the local practitioners can be said to form a "volunteer corps of medical officers," nor can we learn that they are parties to such an arrangement. And as the number of civilian practitioners is about thirty, to which must be added ten military surgeons, the division of responsibility among such a number would leave but little to be borne by any individual member. It is true that a half-crown fee is paid by the local board to medical men for notifying a case of infectious disease. Surely, the *Kentish Independent* does not suppose that notification is the duty of a medical officer of health. His duty is, amongst other things, to deal with infectious disease when it has been notified. This function is now performed by the inspector of nuisances, who is an engineer, and his assistant; and though Mr. Spear very properly praises the labours of these officials, he points out forcibly, though the *Kentish Independent* cannot agree with him, that it is impossible for the sanitary affairs of a town to be satisfactorily conducted in the absence of a responsible skilled medical adviser.

Consultants' Mileage Fee.—We do not think a uniform tariff in consultation fees practicable.

CONCUSSION, DISLOCATION, OR MERELY A FAINT—WHICH WAS IT?

To the Editor of THE LANCET.

SIR,—With reference to the interesting case of displacement and fracture of the axis recorded in your issue of the 14th inst., I beg to submit an extract from a very rare book—"A Journal or Historical Account of the Life, Travels, &c., of George Fox," London, 1694, vol. ii., pp. 151-2, which appears to me to bear upon it, and which you will, I trust, publish, if your space will so allow. Describing a visit he (Fox) paid to Shrewsbury, he says that one of his companions, named John Day, "being to try an horse, got upon his back; and the horse fell a running, and cast him upon his head, and brake his neck, as the people said. They that were near him took him up dead, and ..... laid him on a tree. I got to him as soon as I could, and feeling on him concluded he was dead. And as I stood by him, pitying him and his family, I took hold of his hair, and his head turned any way, his neck was so limber. Whereupon, throwing away my stick and my gloves, I took his head in both my hands, and setting my knees against the tree I raised his head and perceived there was nothing out or broken that way. Then I put one hand under his chin and the other behind his head, and raised his head two or three times *with all my strength, and brought it in.* I soon perceived his neck began to grow stiff again, and then he began to rattle in the throat, and quickly after to breathe. The people were amazed, but I bid them ..... carry him into the house. They did so, and set him by the fire, and afterwards put him to bed. After he had been in the house awhile he began to speak, but did not know where he had been. The next day we passed away (and he with us, pretty well), about sixteen miles, ... and many hundred miles did he travel with us after this." If success be a test of treatment, a more judicious one could scarcely have been employed in this instance. I think it quite possible that there was a displacement here of one or other of the upper cervical vertebræ, and the words I have italicised would seem to imply as much. But of this your readers are as competent to judge as I am, and I merely reproduce the extract as a curiosity in its way, and in the connexion just referred to.

I am, Sir, yours obediently,

Feb. 17th, 1885. FRANCIS.

Mr. F. Peter Smith.—The papers sent are very bad; but we cannot prosecute the subject nor the rascals who thrive on the ignorance of their dupes.

Dr. J. Chapman (Paris).—We cannot undertake to return MSS. not used.

"PRURITUS VULVÆ."

To the Editor of THE LANCET.

SIR,—In your issue of the 24th ult. "M.D." asks for suggestions regarding the treatment of pruritus vulvæ, the various remedies employed by him not having succeeded. I would suggest an examination of the urine for sugar, diabetes being so frequently accompanied by pruritus—in fact, it is occasionally the only symptom complained of. If sugar be found, I would recommend "M.D." to administer half grain of codeia three times a day (with the usual limitations regarding diet), and, I think, in a short time the pruritus will be greatly relieved. It will be interesting to know the result of treatment in the case.

I am, Sir, yours faithfully,

Leominster, Feb. 16th, 1885. RICHARD WATTS WHITE.

PANFILO CUSTALDI AND THE ART OF PRINTING.

A COLLECTION of interesting documents relating to the life of Panfilo Custaldi, for whom the honour of the invention of printing has been claimed by patriotic Italians, have recently been discovered, and will, we understand, shortly be published in the *Archivio Storico per Trieste, l'Istria, ed il Trentino*. It is not stated that these documents give any support to the claim above alluded to; but it appears that Custaldi, who was a physician practising in Capo d'Istria, was already practising the art of printing with movable types as early as 1461, in partnership with two other residents in the same town.

Trocar.—If the patient was in a critical state when seen by our correspondent, it would not be right to expose him to a four hours' drive while suffering from strangulated hernia. If operative interference was not immediately necessary, "Trocar" was carrying out the intentions of the Local Government Board, and the wishes of most boards of guardians, by sending the patient to be operated upon to the nearest hospital or infirmary.

M.R.C.S.—1. No. 1, Old Serjeants' Inn, Chancery-lane, W.C.—2. No.

"CASCARA SAGRADA."

To the Editor of THE LANCET.

SIR,—We notice in your issue of the 14th inst. a correspondent, "A. G. C.," asks where to procure a really trustworthy preparation of the cascara sagrada. We beg to say that the experiments made by medical practitioners in this country with Messrs. Parke, Davis, and Co.'s preparation, for which we are the agents, have been most successful; and we shall be very pleased to forward samples to "A. G. C." and any other medical man who may wish to try it.—Yours faithfully,

BURGOYNE, BURBIDGES, CYRIAX, AND FARRIES.

Coleman-street, E.C., Feb. 16th, 1885.

To the Editor of THE LANCET.

SIR,—"A. G. C." should try the fluid extract made by Messrs. Parke, Davis, and Co., or by Messrs. Ferris and Co. In my hands they have proved most effectual. I can also speak favourably of the pills made by Messrs. W. H. Schieffelin and Co., each of which contains two grains of the solid extract. I am, Sir, yours truly,

Peterborough, Feb. 14th, 1885. W. HASBY, M.D.

To the Editor of THE LANCET.

SIR,—In reference to the inquiry by "A. G. C." in your current issue, I would beg to observe that the extract of cascara sagrada was prescribed for me recently in the form of a pill (in four-grain doses), combined with nux vomica, belladonna, and gentian, by my friend Dr. Cullimore of Welbeck-street, W., for obstinate constipation due to sluggish action of the liver, with marked benefit. I found that one four-grain dose twice a day for a few days, and afterwards once a day, produced the desired result. I would add, as desired by your correspondent, that the medicine was made up by Messrs. Twinberrow and Son of Wigmore-street, Cavendish-square. I am, Sir, yours truly,

Feb. 16th, 1885. JOHN LUCAS, M.D.

*** Other communications received by us would seem to show that there is no difficulty in obtaining trustworthy samples of the cascara.—ED. L.

Mr. Edward Wheeler.—We did not mean to affirm that Jenner appreciated the necessity for revaccination as we now understand it; but that the second subjection to the operation by the small-pox hospital nurses, and its magnificent results, are, in a sense, the confirmation and completion of Jenner's discovery of vaccination. What view does Mr. Wheeler take of the immunity enjoyed by the officials of the small-pox hospitals?

THE ADMISSION OF PATIENTS SUFFERING FROM FITS TO ASYLUMS FOR IDIOTS.

To the Editor of THE LANCET.

SIR,—I notice in one of your answers to correspondents in THE LANCET of last week you say: "Patients subject to fits are, we believe, ineligible for admission to idiot asylums." Having been attached to the Earlswood Asylum some years ago, I beg to inform you that the majority of the patients in that institution are subject to fits, and I believe it is the same at other idiot asylums.—Yours faithfully,

Brentwood, Feb. 16th, 1885. J. R. WHITE, M.B.

*** The published prospectuses of the majority of idiot asylums do not bear out the last statement of our correspondent's letter.—ED. L.

THE ARABS WOUNDED IN THE SOUDAN.

To the Editor of THE LANCET.

SIR,—May I ask through the medium of your valuable journal whether any provision is made for the surgical and medical treatment of the brave Arabs wounded in the battles in the Soudan? It is to be trusted that they receive the same humane treatment as our own wounded soldiers, and are not left to die unaided on the ground which they so bravely defend. I am, Sir, yours obediently,

Leeds, Feb. 14th, 1885. H. A. ALLBUTT, M.R.C.P.

MEDICAL ETIQUETTE AT CRIEFF.

A CORRESPONDENCE has been sent us for publication by Dr. Gairdner, jun., of Crieff, between himself and Dr. Alex. Thom, jun., beginning as far back as January, 1881, and ending in February, 1885. It will be readily understood that we have seldom room for such a correspondence in THE LANCET. We certainly have not at present. There is another objection to its publication in the fact that it is incomplete. Dr. Thom chose, rightly or wrongly, to answer Dr. Gairdner by letter, defending himself by saying that he had also answered verbally. It is difficult to express a judgment on an incomplete correspondence. We regret the difference between Dr. Gairdner and Dr. Thom, the more so as it seems to us that nothing could be in better taste and form than the letter from Dr. Thom to Dr. Gairdner with which the correspondence opens, accepting, but only reluctantly, a half fee sent him by Dr. Gairdner for attending a case in his absence. His action in other cases is not, in appearance, satisfactory: as when he visits as a friend a case in which his father had met Dr. Gairdner in consultation; and when he visits after delivery an obstetric case of Dr. Gairdner's, which he attended in an emergency arising from the latter's unavoidable absence in the country. But then we have not his version of the facts, and hesitate to pronounce judgment without it. In one case we are not so sure that Dr. Gairdner is quite right—where he declines a consultation with Dr. Thom on the doubtful ground *that the patient had had other consultations*. But the matters in dispute seem to us such as should admit of easy adjustment.

M.D. wishes to know if magnetism or galvanism is effectual in hypochondria with a tendency to hysteria?

CASE OF ATHETOSIS.

To the Editor of THE LANCET.

SIR,—On Nov. 5th, 1884, John H——, a native of Bremen, was sent to me by a fellow practitioner for treatment. On examination, I found him suffering from that rare and peculiar nervous affection called by Hammond "athetosis." Unfortunately, I was able to keep the patient under observation for only a short time, as he was a vagrant, and left the city after his second visit to my office. He was a German, healthy, well nourished, and, according to his statement, strictly temperate. There was no history of syphilis, nor was there any evidence of struma or protean disease of any kind whatever. The patient said he had been suddenly seized with a violent pain in the right forearm, with convulsive movements of the fingers of the right hand, while walking, six weeks before he came to me. The pain in the arm and the movements of the fingers had continued without intermission. He said that his companions had told him the convulsive movements of the fingers continued during sleep. There were continual contractions and partial extensions of all the fingers of the hand affected. The muscles of the forearm were hard and rigid, and seemed not to relax for a moment during the whole time he was under my observation. The patient was unable to close his hand, having no control whatever over the flexor muscles. He had slight control over the extensors, being able by exerting all his power to extend the fingers; they were, however, immediately flexed again. The movements of the fingers were of a peculiar writhing and twisting character. The patient complained of considerable pain in the arm up to the elbow. There was slight hyperæsthesia in the affected forearm and hand, and an increase in temperature. In all other parts of the body sensibility to touch and temperature were normal. The involuntary contractions of the fingers came on hurriedly, violently, and with great force. The contractions were somewhat paroxysmal, with no increase of pain in proportion to the violence of the contractions. The patient was unable for a single instant to arrest the movements of the fingers and fix them in any one position. I gave him as a *placebo* a hypodermic injection of morphia, and directed him to call again on the following morning. He came, but for some reason would allow no further examination, and left for I know not where.

I have seen but one other instance of this peculiar affection, and that was a mulatto woman brought before the Tri-State Medical Association at Henderson, Ky., in 1878, by Dr. Dixon, if I am not mistaken. I have endeavoured to give this man's case succinctly, for fear of occupying too much space, and will bring my communication to an end without further comment. I am, Sir, yours faithfully,

Louisville, Kentucky, U.S., Jan. 7th, 1885. JAMES WEIR, M.D.

Mr. C. C. Whitefoord may, we think, rest content with the strong expression of opinion on the part of the judge and the jury. It is scarcely necessary to publish our correspondent's letter.

"DEGENERATION OF LONDONERS."

To the Editor of THE LANCET.

SIR,—I venture to suggest that degeneration occurs amongst Londoners principally from early sexual indulgence and syphilis, apart altogether from deficiency of food or air. A very little experience in practice, especially among the poorer classes, will convince anyone that the extent to which Londoners suffer from syphilis is appalling.

I am, Sir, yours truly,

Feb. 9th, 1885. OBSERVER.

THE NEW TEACHING UNIVERSITY.

M.R.C.S. and L.S.A. recommends that the course of study be the same as in the Scotch Universities. But his further recommendations are peculiar—that those who are ambitious only for the College and the Hall qualifications should be given the M.B. and C.M. degrees, while those who would aim at passing the examination of the Royal College of Physicians should be dubbed "M.D." This is rather arbitrary.

Mr. F. R. Fisher.—Next week.

"AN EASY METHOD OF APPLYING THE FORCEPS."

To the Editor of THE LANCET.

SIR,—I have for the last dozen years, or more, been in the habit of applying the upper blade of the forceps in the manner described in THE LANCET of to-day by your correspondent, Mr. Lucas; and as I can fully corroborate all the advantages he claims for it, I venture to encourage its general adoption in preference to the old method described in most of the works on midwifery. The tugging and persuasion that are often required to get the patient into the desired position are alike distressing and terrifying to both the sufferer and her friends, whilst if the method suggested be used the forceps may often be slipped on without the patient actually knowing when. I have generally found it sufficient to have the knees well drawn up without separating the legs, and it is really astonishing how easily the blade usually sweeps round the head into the required position.—I am, Sir, yours faithfully,

HENRY CARTMEL, M.R.C.S.

Carlton House, Manchester, Feb. 14th, 1885.

To the Editor of THE LANCET.

SIR,—In reference to Mr. Lucas's letter in the current number of THE LANCET on "an easy method of applying the forceps," I may say I have adopted precisely the same procedure for the past twenty years. I learnt it from my father-in-law, who practised it thirty years before, and he got it from someone else. So it would not appear to be *very* new.

I am, Sir, yours obediently,

Lewes, Feb. 16th, 1885. J. G. BRADEN, M.R.C.S., L.S.A.

*** We have received many other letters showing that the suggested method of applying the forceps is by no means new.—ED. L.

MR. LEAKE AND THE ANTI-VACCINATIONISTS.

THE demands on our space this week will not permit our treating the above-named subject at the length its importance merits. We must therefore defer our comments until our next issue.

A QUERY.

To the Editor of THE LANCET.

SIR,—I shall be greatly obliged if any of your readers would kindly inform me of any school to which a child nine years old could be sent. She is one of four or five children, none of whom can speak intelligibly—saying only a few simple words, and those only half articulated. She has had no illness, but is very perverse, and develops frequently a strong tendency to mischief and destruction, tearing clothing, breaking windows and furniture, &c. Such fits last about a day; in the intervals she is very intractable and disobedient. I regard them as evidences of epileptiform seizures, with tendency to insanity. The parents are related (cousins, I believe); no other family history. They are able to pay.

I am, Sir, yours truly,

Seaforth, Feb. 18th, 1885. F. F. G.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Voight; Messrs. Moxley and Harrison, Barbadoes; Dr. Bate; Dr. J. Gairdner, Crieff; Mr. C. Leslie, Manchester; Mr. G. S. Robinson, London; Mr. A. G. Williams, Brixton; Dr. Fairbank, Doncaster; Mr. H. E. Armstrong, Newcastle-on-Tyne; Mr. L. Newton; Messrs. Burgoyne, Burbidges, and Co.; Mr. Partridge, Stroud; Messrs. Essinger and Neuberger, London; Mr. J. J. Foley, Midleton; Mr. Cartmel, Manchester; Mr. Porter Smith; Mr. H. Allingham, London; Mr. Leake, Manchester; Mr. Crouch, London; Dr. Easby, Peterborough; Mr. G. Rice; Dr. Dudfield; Mr. C. P. Moir, London; Mr. T. P. Stephens, Emsworth; Mr. A. Drysdale, Mentone; Mr. G. A. Wright, Manchester; Mr. J. N. Marshall, Glasgow; Mr. J. R. Thomas, Llanelly; Dr. Finlay, London; Mr. Brodhurst, London; Dr. Lucas, London; Dr. Notley; Mr. Lawson Tait, Birmingham; Dr. Bristowe, London; Messrs. Calvert and Co., Manchester; Messrs. Livingstone, Edinburgh; Mr. Whitefoord, London; Mr. Haywood, Manchester; Mr. English, Canterbury; Mr. Ricker; Mr. Lewers; Mr. Stansby, Derby; Messrs. Beal and Co., Brighton; Mr. Wharton Jones, Ventnor; Mr. Braden, Lewes; Mr. W. Adams, London; Dr. McLean, London; Dr. Hair, Peterborough; Mr. Higgens, London; Mr. W. A. Buchan, Plymouth; Dr. P. W. Macdonald, Dorset; Mr. F. A. Gray, Ottery St. Mary; Mr. R. W. White, Leominster; Mr. R. Pollock, Wellingford; Mr. Atwood, York; Dr. J. Chapman, Paris; Mr. R. Jeffreys, Chesterfield; Dr. Spencer Cobbold, London; Miss Ryan, Kendal; Messrs. Robertson and Scott, Edinburgh; Mr. Armstrong, Manchester; Mr. Dalby, Cannock; Mr. Fry, Swindon; Dr. Pritchard, Hinckley; Dr. Ridge, Enfield; Mr. Juler, London; Dr. M. Thomson, London; Dr. Roberts; Mrs. Carless, Liverpool; Messrs. Oppenheim and Co., London; Mr. Kinder, Leicester; Mr. Bridgman, Barnstaple; Mr. Porter, Sheffield; Messrs. Lee and Martin, Birmingham; Mr. Abbs, Dewsbury; Messrs. Allen and Hanburys, London; Messrs. Loeffund and Co., London; Mr. Barrow, Notts; Mr. Gurner; Mr. Burdett, London; Mr. Blore, Leeds; Mr. Brown, Edinburgh; Messrs. May and Co., London; Messrs. Harrison and Brass, Elgin; Mr. Wrixon, Watford; Mr. W. J. Grey, Newcastle; Mr. McLaglen, London; Mr. Johnston, Belper; Mr. F. F. German, Seaforth; Dr. Dedolph, St. Paul; A Constant Reader of THE LANCET; Subscriber; Trocar; M.D.; Surgeon, R.N.; Francis; A Member of Long Standing; Puzzled; Oxonian; Edith, West Kensington.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Brayn; Mr. Palmer, Neyland; Mr. Sweeting, Lynn; Mrs. Higginbotham, Glasgow; Mrs. Williams; Mrs. Marvack, Truro; Miss Osborne, Eastbourne; Dr. Jones, Hulme; Mr. Woodd; Messrs. Curtice and Co., Staines; Mr. Hutchinson, Cheltenham; Mr. Dalmas, Leicester; Mr. Linney, Hitchin; Mr. Thorpe, Chelmsford; Mr. Page, Armley; Dr. Douglas, Perth; Messrs. R. and F. Low, London; Mr. Lemmon, Hastings; Dr. Wyman; Messrs. Mackay, Edinburgh; Mr. Eberle, Thirsk; Mr. Brown, Pimlico; Mr. Stutter, Wickhambrook; Mr. Gill, Anerley; Mr. Malins, Macclesfield; Dr. Maud, Edinburgh; Mr. Paine, Worthing; Dr. Mackay, Bak; Mr. Morgan, London; Mr. Ferguson, Hinckley; Mr. Wetwan, Southwold; Mr. Mason, Highbury; Mrs. James, St. John's Wood; Medicus, Dorking; R. C. B., Peckham; Secretary, Royal Cornwall Infirmary; J. S.; G. S.; Hounds; E. C., Burton-on-Trent; Chirurgus; M.R.C.S., London; A. E. T., Clapham; F. G., Walthamstow; B. D. F.; M.B., Ilmsley; M. D. S. A., Manchester; Matron, Bedford General Infirmary; Molar, Virginia-road; Nursing Sister, Edinburgh; A. B., Leeds; A. B., Sheffield; Medicus, Dorrington; Medicus, Great Marthen; W. W., Woolton; W. R., Yoxford; Medicus, Edgbaston; L.R.S.P., Vauxhall; L.R.C.P., Norwich; A., Sheffield; M.D., Swanage; Fides, Croydon.

Manchester Examiner, Syracuse Sunday Herald, Glasgow Herald, North Devon Journal, Wellington Weekly News, Western Daily Mercury, Glasgow Herald, Sheffield Daily Telegraph, Southport Visitor, Doncaster Gazette, Musical Opinion, Liverpool Courier, Manchester Examiner, &c., have been received.

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An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Sons' Railway Bookstalls throughout the United Kingdom, and all other Advertising Agents.

Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.